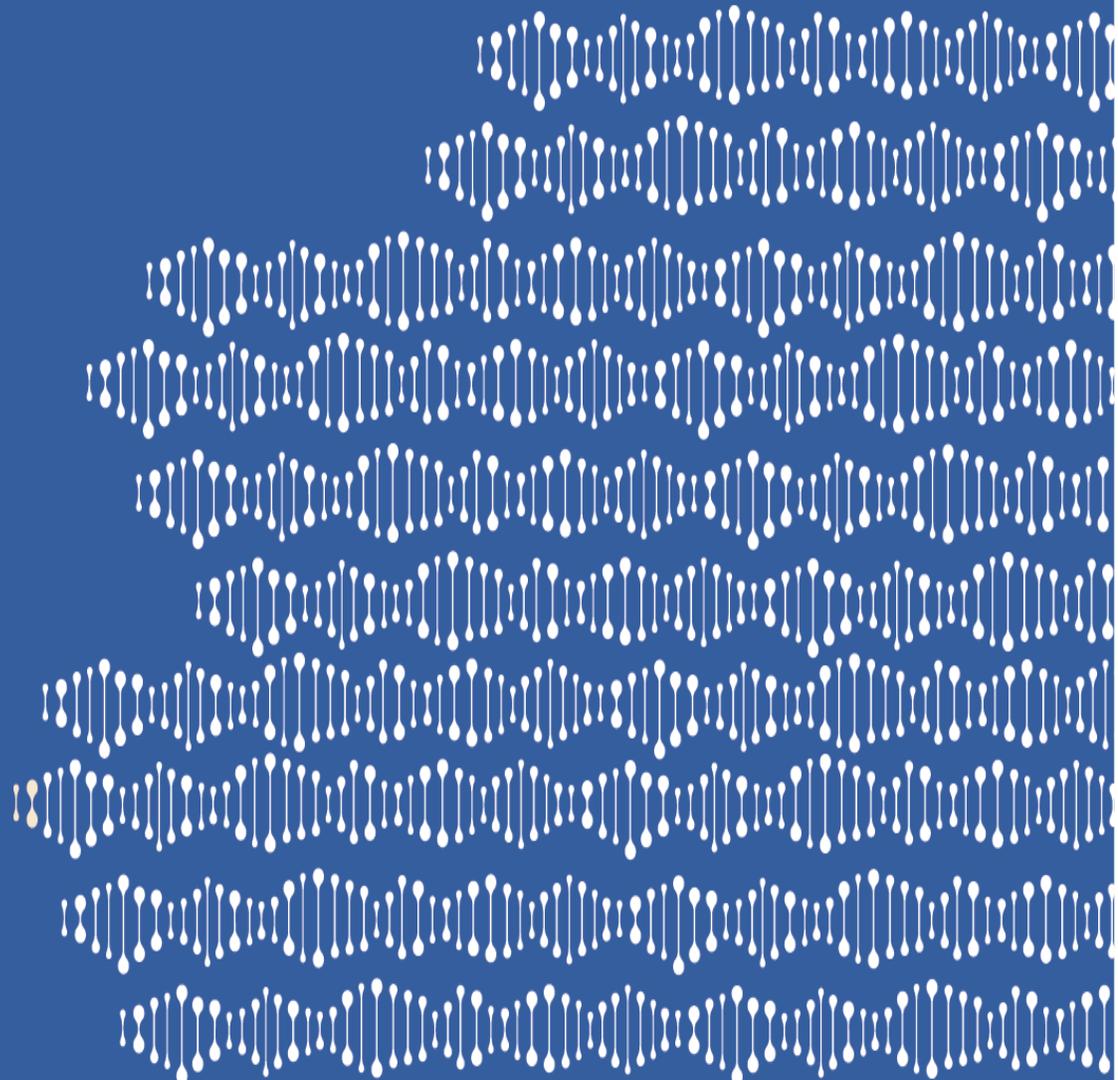




CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

Oversight Committee Meeting

August 18, 2021





CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

Summary Overview of the August 18, 2021, Oversight Committee Meeting

This summary provides an overview of major agenda items and background on key issues for Committee consideration at the August 18, 2021, Oversight Committee meeting.

CEO Report

Wayne Roberts will present the CEO's report and address issues including a personnel update, grant funds available for FY 2021 and other topics.

Chief Compliance Officer Report

Vince Burgess will report on the status of required grantee reports, financial status report reviews, desk reviews and site visits, annual compliance attestation, single audit tracking, and training.

Chief Scientific Officer Report and Grant Award Recommendations

Dr. James Willson will provide an update on the Academic Research Program and present the Program Integration Committee's (PIC) 62 award recommendations for Early Clinical Investigator Awards, Core Facility Support Awards, Clinical Trial Network Awards, High-Impact/High Risk Awards, Texas Clinical Trial Participation Awards, Texas Regional Excellence in Cancer Research Awards, Recruitment of First-Time, Tenure-Track Faculty Members, and Recruitment of Rising Stars, totaling \$103,416,042. Dr. Willson will also present the proposed timeline and requests for applications (RFAs) for FY 2022.

CPRIT will not publicly disclose information related to the Academic Research grant applications recommended for funding until the Oversight Committee meeting. The information is available to board members through a secure electronic portal.

Chief Prevention Officer Report and Grant Award Recommendations

Ramona Magid will update the Oversight Committee on the on the agency's prevention activities and present the PIC's nine award recommendations totaling \$11,396,581. The recommended awards include Tobacco Control and Lung Cancer Screening; Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations; Evidence-Based Cancer Prevention Services; and Dissemination of CPRIT-Funded Cancer Control Interventions.

CPRIT will not publicly disclose information related to the Prevention grant applications recommended for funding until the Oversight Committee meeting. The information is available to board members through a secure electronic portal.

Chief Product Development Officer Report and Grant Award Recommendation

Dr. WalkerPeach will provide an update on the Product Development Program. She will also present the PIC's two award recommendations for Texas Company Product Development

Research Awards totaling \$27,565,207. Dr. WalkerPeach will also present her proposal to revise CPRIT's policy on matching funds for repeat grantees.

CPRIT will not publicly disclose information related to the Product Development Research grant applications recommended for funding until the Oversight Committee meeting. The information is available to board members through a secure electronic portal.

Internal Auditor Report

Weaver and Tidwell, CPRIT's internal auditor, will provide an internal audit update and the FY 2022 audit plan.

Appointments to the Scientific Research and Prevention Programs Committee

Mr. Roberts has provisionally appointed four new members to CPRIT's Scientific Research and Prevention Programs Committees. CPRIT's statute requires the Oversight Committee to approve the CEO's recommendations before the appointments are final. CPRIT has provided biographical sketches for the appointees for the Oversight Committee's consideration.

Advisory Committee Appointments and Annual Reports

Mr. Roberts will present new appointments to the Advisory Committee on Clinical Trials and the Product Development Advisory Committee. Mr. Roberts will also provide a proposed schedule of presentations for the advisory committees' FY 2022 reports to the Oversight Committee. The Clinical Trial Advisory Committee will provide its FY 2021 annual report.

FY 2022 Honoraria Policy

Mr. Roberts will present CPRIT's FY 2022 honoraria policy for peer reviewers.

Health & Safety Code § 102.1062 Waivers

Mr. Roberts will present four conflict of interest waivers pursuant to Texas Health and Safety Code 102.1062. The FY 2022 waivers are for Don Brandy, Dr. John Hellerstedt, Dr. Jim Willson, and the Review Council Members. The Oversight Committee approved similar waivers for these four for FY 2021.

Amendment to 25 TAC Chapter 703

Ms. Eckel will present the final order approving an amendment to the agency's Chapter 703 administrative rules, which the Oversight Committee provisionally approved at the May meeting. If approved, the amendment will become effective in September.

Chief Operating Officer Report and Contract Approvals

Heidi McConnell will discuss the operating budget, performance measures, and debt issuance history for the third quarter of FY 2021. She will also present recommendations for contract approvals for the following services: an economic assessment of the cost of cancer in Texas, internal audit, strategic communications, due diligence services, and outside legal services.

Subcommittee Business

The Nominations subcommittee will consider new subcommittee assignments for all members for fiscal year 2022-2023. The Oversight Committee must vote to approve the changes to subcommittee membership. As noted by Presiding Officer Dee Margo at the May 19, 2021, Oversight Committee meeting, the Nominations subcommittee will not continue after FY 2021. Mr. Roberts will present proposed amendments to the Board Governance subcommittee charter to reflect the addition of Nomination subcommittee responsibilities beginning in FY 2022.

Election of Board Officers

The Nominations subcommittee will recommend a slate of officers for FY 2022 – FY 2023 for the Oversight Committee’s approval at the August meeting. The outgoing Oversight Committee Chair has worked with the Nominations subcommittee to develop the slate of officers. CPRIT will provide the proposed slate to member after the Nominations subcommittee meets August 13.

FY 2022 Meeting Dates

Mr. Roberts will present the proposed dates for the FY 2022 Oversight Committee quarterly meetings and the regular subcommittee meetings for Oversight Committee approval.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

Oversight Committee Meeting Agenda

August 18, 2021
9:00 a.m.

This Meeting Will Be Conducted by Videoconference and Telephonically

In accordance with Texas Government Code Section 418.016, Governor Abbott has suspended various provisions that require government officials and members of the public to be physically present at a specified meeting location.

Members of the public may connect to the meeting by going to the URL:

<https://www.zoomgov.com/j/1611413090?pwd=Zm5KRlJCWjZPL0NudjNDOEx5SUZ6QT09>

The public may also join via telephone audio only using the following:

US: +1 669 254 5252 or +1 646 828 7666 or +1 551 285 1373 and entering the **Webinar ID** of **161 141 3090** when prompted.

A recording of the meeting will be available after the meeting on CPRIT's public website. CPRIT will provide an electronic copy of the agenda packet at <https://cprit.texas.gov/oversight-committee/meetings/> by August 16.

A member of the public wishing to comment during the meeting must contact Melanie Cleveland (mcleveland@cprit.texas.gov) at least 30 minutes prior to the posted meeting start time. When the Oversight Committee reaches the "Public Comment" agenda item, the Chair will recognize each person requesting to provide public comment by name. The Chair may limit the amount of time a member of the public may speak. CPRIT cannot guarantee that an individual contacting Ms. Cleveland less than 30 minutes before the posted start time may provide public comment.

The Oversight Committee may discuss or act on any item on this agenda, and as authorized by the Texas Open Meetings Act, Texas Government Code Section 551.001 et seq., may meet in closed session concerning any purpose permitted by the Act.

1. Call to Order
2. Roll Call/Excused Absences
3. Adoption of Minutes from the May 19, 2021, meeting Tab 1
4. Public Comment
5. Chief Executive Officer Report Tab 2
6. Chief Compliance Officer Report and Compliance Certification of Grant Award Process Tab 3
7. Chief Scientific Officer Report Tab 4
 - Grant Award Recommendations

- FY 2022, FY 2023 Requests for Applications
8. Chief Prevention Officer Report Tab 5
 - Grant Award Recommendations
 9. Chief Product Development Officer Report Tab 6
 - Grant Award Recommendations
 - Multiple Awards/Matching Funds policy
 - DP140072, DP190066, DP200081 - Revenue-sharing obligations realized under the standards established as required by Texas Health & Safety Code Section 102.256
 10. Internal Auditor Report Tab 7
 - FY 2022 Internal Audit Plan
 11. Scientific Research and Prevention Program Committee Appointments Tab 8
 12. Advisory Committees Tab 9
 - Clinical Trial Advisory Committee Annual Report
 - Appointments
 - Schedule for FY 2022 Advisory Committee Annual Report Presentations
 13. FY 2022 Honoraria Policy Tab 10
 14. Health & Safety Code Section 102.1062 Waivers Tab 11
 15. Amendments to 25 T.A.C. Chapters 703 Tab 12
 - Final Order Approving Amendment to Chapter 703
 16. Chief Operating Officer Report Tab 13
 - De-obligation of Grant Funds
 17. Contract Approvals Tab 14
 - Due Diligence Services (contract renewal)
 - Strategic Communications (contract renewal)
 - Economic Assessment of the Cost of Cancer in Texas (contract renewal)
 - Internal Audit Services (contract renewal)
 - Outside Counsel Services
 18. Subcommittee Business Tab 15
 - FY 2022 – 2023 Subcommittee assignments
 - Board Governance Charter
 19. Personnel – Chief Scientific Officer
 20. Election of Board Officers Tab 16
 21. Compliance Investigation Pursuant to Health & Safety Code § 102.2631
 22. Consultation with General Counsel
 23. Future Meeting Dates and Agenda Items Tab 17
 - FY 2022 Meeting Dates
 24. Adjourn



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

**Oversight Committee Meeting Minutes
May 19, 2021**

NOTE: CPRIT conducted this meeting by videoconference in accordance with Governor Abbott's suspension of various provisions requiring government officials to be physically present at a specified meeting location. Unless the information is confidential, the reports, presentations, and grant award information referenced in the minutes are available in the "Oversight Committee Board Packet" section for the corresponding meeting date at <http://ocmeetings.cprit.texas.gov>.

The Oversight Committee took up several agenda items out of order to accommodate availability of presenters.

Call to Order – Agenda Item 1

With a quorum present, Presiding Officer Dee Margo called the meeting to order at 9:04 a.m.

Roll Call/Excused Absences – Agenda Item 2

Committee Members Present

David Cummings, M.D.

Ambrosio Hernandez, M.D.

Donald (Dee) Margo

Will Montgomery

Mahendra Patel, M.D.

Cindy Barberio Payne

Bill Rice, M.D.

Craig Rosenfeld, M.D. - *Dr. Rosenfeld joined the meeting late during discussion of agenda item 7*

Adoption of Minutes from the February 17, 2021, Meeting – Agenda Item 3 – Tab 1

MOTION:

On a motion by Dr. Rice and seconded by Mr. Montgomery, the Oversight Committee unanimously voted to approve the minutes of the February 17, 2021, Oversight Committee meeting as presented.

Public Comment – Agenda Item 4

Presiding Officer Dee Margo recognized Sumita Jonak to provide public comment. Ms. Jonak talked about product development and asked the Oversight Committee about CPRIT's upcoming review cycles. Presiding Officer Margo asked CPRIT staff to follow up with Ms. Jonak and respond to her questions after the meeting.

Grantee Presentation – Agenda Item 5, Tab 2

Presiding Officer Margo briefly dropped off the videoconference to resolve technical issues during this agenda item. Vice Presiding Officer Dr. Mahendra Patel presided over the meeting until Mr. Margo rejoined the meeting before taking up Agenda Item 7.

CPRIT's Chief Scientific Officer Dr. Jim Willson introduced John Cooke, M.D., Ph.D. Dr. Cook is the Chair of the Department of Cardiovascular Sciences at the Houston Methodist Research Institute, Director of the Center for Cardiovascular Regeneration, and Medical Director of the CPRIT supported RNA Therapeutics Core Facility. He presented an overview of the work he and his team are conducting on the CPRIT-funded projects.

Dr. Cooke responded to a question about whether the Houston Methodist Research Institute subsidizes the price charged to CPRIT researchers for using the core facility, explaining that the institution subsidizes the price charged all Texas researchers with CPRIT or federal grant funds. Committee members thanked Dr. Cooke for his presentation and work in providing researchers across Texas with RNA Therapeutic resources.

Chief Compliance Officer Report and Compliance Certification for the Proposed Grant Awards – Agenda Item 7, Tab 4

Taking agenda item 7 out of order, Presiding Officer Margo recognized Chief Compliance Officer Vince Burgess to present the Compliance Report and Compliance Certification of Grant Award Process. Mr. Burgess updated members on the compliance program activities for the past quarter. He highlighted the annual compliance attestation process, explaining that CPRIT requires Product Development grantees to submit documentation demonstrating compliance with the Texas Location Criteria. Compliance specialists are working with one grantee to submit required documentation. Mr. Burgess reported that the compliance team developed a match matrix to help grantees understand which expenses are allowable for matching purposes.

An Oversight Committee asked Mr. Burgess how CPRIT addresses the situation when a grantee has unallowable match expenditures. Mr. Burgess responded that CPRIT works with the grantee to identify other allowable expenses to fulfill the match requirement. Another Oversight Committee member asked about the portion of matching expenses reviewed by CPRIT prior to the introduction of the matching review enhancements. Mr. Burgess explained that prior to the enhancements, onsite compliance reviews include sampling of the matching expenditures for approximately 10-15% of expenditures.

Mr. Burgess certified the review process for the proposed academic research and prevention award slates presented for the Oversight Committee's consideration, explaining that the review complied with all applicable state and agency requirements.

Chief Scientific Officer Report and Grant Award Recommendations – Agenda Item 8, Tab 5

Presiding Officer Margo recognized Dr. Willson to present the academic research program update and award recommendations. Dr. Willson referred members to tab 5 of the meeting book and provided an overview of the Proposed Academic Research Scholar RFAs for Fiscal Year 2022 Cycle 1 and reported on the number of applications submitted for the 21.2 RFA Cycle. Dr. Willson will present Scientific Review Council (SRC) recommendations for cycle 21.2 to the Program

Integration Committee (PIC) and the Oversight Committee in August.

Dr. Willson referred members to page 5 of the Proposed Grant Award book and presented the academic research award slates recommended by the SRC and the PIC for the 21.1 review cycle and recruitment cycles 21.6 and 21.7, 21.8 and 21.9. The recommendations include 21 awards from three grant mechanisms totaling \$60,320,920.

Recommended FY 2021.1 Research Training Awards

Rank	App. ID	Award	Score	Application Title	PI	PI Organization	Budget
1	RP210028	RTA-Renewal	1.4	The Future of Cancer Research: Training Program for Basic and Translational Scientists	Keyomarsi, Khandan	The University of Texas M. D. Anderson Cancer Center	\$4,000,000
2	RP210041	RTA-Renewal	1.7	Cancer Intervention and Prevention Discoveries Program	Cobb, Melanie	The University of Texas Southwestern Medical Center	\$3,748,675
3	RP210037	RTA-Renewal	1.8	Systems Epidemiology for Cancer Training Program (SECT Program)	Spitz, Margaret	Baylor College of Medicine	\$3,593,867 *
4	RP210043	RTA	2.5	Cancer Therapeutics Training Program (CTTP)	Davies, Peter	Texas A&M University System Health Science Center	\$3,136,872
5	RP210046	RTA-Renewal	2.9	HSC Scholars in Cancer Research	Vishwanatha, Jamboor	University of North Texas Health Science Center at Fort Worth	\$3,870,641
6	RP210042	RTA-Renewal	2.9	Collaborative Training of a New Cadre of Innovative Cancer Prevention Researchers	Fernandez, Maria	The University of Texas Health Science Center at Houston	\$3,998,230
7	RP210045	RTA	2.9	Biomedical Informatics, Genomics, and Translational Cancer Research Training Program (BIG-TCR)	Zhao, Zhongming	The University of Texas Health Science Center at Houston	\$3,998,553
8	RP210027	RTA-Renewal	3.0	Baylor College of Medicine Comprehensive Cancer Training Program	Rosen, Jeffrey	Baylor College of Medicine	\$3,974,082

*Panel and SRC Recommended a reduced budget of \$3,593,867 (a total reduction of \$62,005)

Recommended Recruitment Awards for Cycles 21.6, 21.7, 21.8 and 21.9:

Rank	App. ID	Award	Candidate	Organization	Budget	Overall Score
1	RR210028	RFTFM	Julea Vlassakis, Ph.D.	Rice University	\$2,000,000	1.0
2	RR210035	RFTFM	Chen Yao, Ph.D.	The University of Texas Southwestern Medical Center	\$2,000,000	1.0
3	RR210044	RFTFM	Jason Sheltzer, Ph.D.	The University of Texas M. D. Anderson Cancer Center	\$2,000,000	1.0
4	RR210039	RFTFM	Cornelius Y. Taabazuing, Ph.D.	Baylor College of Medicine	\$2,000,000	1.0
5	RR210029	RFTFM	Dongyin Guan, Ph.D.	Baylor College of Medicine	\$2,000,000	1.4

Rank	App. ID	Award	Candidate	Organization	Budget	Overall Score
6	RR210037	RFTFM	Blair Benham-Pyle, Ph.D.	Baylor College of Medicine	\$2,000,000	1.8
7	RR210050	RFTFM	Cassandra Callmann, Ph.D.	The University of Texas at Austin	\$2,000,000	1.8
8	RR210031	RRS	Jeremy Wilusz, Ph.D.	Baylor College of Medicine	\$4,000,000	2.0
9	RR210034	RFTFM	Sihan Wu, Ph.D.	The University of Texas Southwestern Medical Center	\$2,000,000	2.0
10	RR210033	RFTFM	Brian Christopher Miller, M.D., Ph.D.	The University of Texas Southwestern Medical Center	\$2,000,000	2.0
11	RR210040	RFTFM	Joshua Riback, Ph.D.	Baylor College of Medicine	\$2,000,000	2.0
12	RR210048	RFTFM	Courtney M. Schroeder, Ph.D.	The University of Texas Southwestern Medical Center	\$2,000,000	2.0
13	RR210042	RRS	Stephanie Seidlits, Ph.D.	The University of Texas at Austin	\$4,000,000	2.0

Conflict of Interest Notification

Presiding Officer Margo noted for the record that no Oversight Committee members reported conflicts of interest with any proposed academic research awards.

Approval Process – Academic Research Awards

Presiding Officer Margo called for a vote on the three slates of award recommendations.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice the Oversight Committee members voted unanimously to approve the PIC’s recommendations for the Research Training grants, the Recruitment of First Time, Tenure-Track, and Recruitment of Rising Stars award slates.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee members voted to approve the delegation of contract negotiation authority to CPRIT’s CEO and staff and authorized the CEO to sign the contracts on behalf of CPRIT.

Following the vote on the award recommendations, Presiding Officer Margo requested a motion regarding the proposed FY 2022 Recruitment RFAs presented by Dr. Willson.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee members voted to approve the proposed FY 2022 Recruitment RFAs as presented by Dr. Willson.

Chief Prevention Officer Report and Grant Award Recommendations – Agenda Item 9, Tab 6

Presiding Officer Margo recognized Chief Prevention Officer Ramona Magid to update the Oversight Committee on the prevention program and to present the prevention awards. Ms. Magid

reported that review panels were evaluating the FY 2021 Cycle 2 applications and that CPRIT had released four RFAs for the first cycle of FY 2022. In response to an Oversight Committee member’s question about how COVID-19 affected prevention screenings, Ms. Magid explained that Dr. Shokar will address the topic in depth in her Prevention Advisory Committee report later in the meeting.

Grant Award Recommendations

Ms. Magid presented the five prevention program projects totaling \$11,202,949 that the Prevention Review Council and PIC recommended for awards. Ms. Magid reported that all the recommended applications were in response to the one grant mechanism, Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations and address one or more of the Prevention Program activities.

Recommended Awards for Cycle FY 21.1 *Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations* Projects

App. ID	Application Title	PD	Organization	Score	Rank	Budget
PP210003	Taking Texas Tobacco Free among Substance Users within Community-based Healthcare Settings in Rural and Medically Underserved Areas Across Texas	Reitzel, Lorraine R	University of Houston	1.4	1	\$1,998,572
PP210004	BEST 3: The Breast Cancer Education Screening and Navigation Program in West and South Texas.	Shokar, Navkiran K	Texas Tech University Health Sciences Center at El Paso	2.3	2	\$2,500,000
PP210005	Southwest Coalition for Colorectal Cancer Screening (SuCCCeS) 2	Shokar, Navkiran K	Texas Tech University Health Sciences Center at El Paso	2.9	3	\$2,500,000
PP210016	Hep C - C.A.R.E (Colonias Advancing & Restoring Esperanza)	Villarreal, Roberto	University Health System	3.3	4	\$1,712,190
PP210017	Get F.I.T. to Stay Fit, Stepping up to Fight Colorectal Cancer in the Panhandle	Obokhare , Izi D	Texas Tech University Health Sciences Center	3.3	5	\$2,492,187

Compliance Certification

Presiding Officer Margo reminded members that Mr. Burgess previously certified compliance of the prevention awards process.

Conflict of Interest Notification

Presiding Officer Margo noted for the record that no Oversight Committee member reported a conflict of interest with any of the proposed prevention awards.

Approval Process - Prevention Grant Awards

Presiding Officer Margo called for a vote on the five proposed award recommendations.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the PIC's recommendations for the five *Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations* grants recommended by the PIC.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the delegation of contract negotiation authority to the CEO and CPRIT staff and to authorize the CEO to sign the contracts on behalf of CPRIT.

Chief Product Development Officer Report – Agenda Item 10, Tab 7

Presiding Officer Margo recognized Chief Product Development Officer Cindy WalkerPeach, Ph.D., to present the Product Development Research program update. Dr. WalkerPeach reported on the status of the applications under review in the current FY 2021.1 cycle. An Oversight Committee member asked Dr. WalkerPeach if there was a drop in the number of product development applications, other than related to COVID-19. Dr. WalkerPeach responded that she did not see it as a drop.

Internal Auditor Report – Agenda Item 11, Tab 8

Presiding Officer Margo reported that CPRIT's internal auditors were not able to attend the meeting due to out of office travel conflicts. He referred members to the internal auditor's written report behind Tab 8. There were no questions.

Advisory Committees – Item 13, Tab 10

Taking agenda item 13 out of order, Presiding Officer Margo noted that the Oversight Committee's Advisory Committees would provide the next several presentations.

ADVISORY COMMITTEE ANNUAL REPORT PRESENTATIONS

University Advisory Committee (UAC) Annual Report

Presiding Officer Margo recognized Dr. Willson to introduce the Chair of the UAC, Dr. Peter Davies, M.D., Ph.D., to present the Committee's annual report.

Dr. Davies presented the UAC report and recommendations. In response to an Oversight Committee member's question about how Texas compares to other parts of the country regarding supporting and accelerating cancer research, Dr. Davies replied that CPRIT has been a game changer and transformative for premier cancer research and resources in Texas and is the envy of the nation.

The Oversight Committee members thanked Dr. Davies for presenting the annual report and his leadership as UAC Chair.

Product Development Advisory Committee (PDAC) Annual Report

Presiding Officer Margo recognized Dr. WalkerPeach to introduce PDAC Co-Chairs Andrew Strong and Michelle Park, Ph.D., to present the PDAC's annual report and recommendations.

Mr. Strong and Dr. Park presented the PDAC's recommendations for CPRIT product development research pre-award and post-award process improvements and related activities. An Oversight Committee member asked about entities that provide resources as biotech community connectors in Texas. Mr. Strong noted that local organizations such as BIO Houston, Biomed SA (San Antonio) and others serve in such a capacity. Dr. Park responded to an Oversight Committee member's question about the background and expertise needed for Seed Award application reviewers, explaining that reviewers with deep scientific background are important for these earlier stage applications.

The Oversight Committee members thanked Dr. Park and Mr. Strong for the annual report presentation and their leadership on the PDAC.

Prevention Advisory Committee (PAC) Annual Report

Presiding Officer Margo recognized Ms. Magid to introduce Dr. Navkiran Shokar, to present the PAC's annual report and recommendations.

Dr. Shokar presented the PAC's report, including the impact of the COVID pandemic on cancer screening and diagnostic testing, and the committee's recommendations for CPRIT's cancer prevention activities. An Oversight Committee member asked if a method was available to estimate the impact of COVID on later stage diagnoses. Dr. Shokar responded that the data are not yet available. An Oversight Committee asked if CPRIT allows co-funding from other state institutions, foundations, and national funding organizations. Ms. Magid responded that this is allowable and encouraged by the Prevention program.

The Oversight Committee members thanked Dr. Shokar for the annual report presentation and her leadership on the PAC.

Advisory Committee on Childhood Cancer (ACCC) Annual Report

Presiding Officer Margo recognized Dr. Willson to introduce ACCC Chair Dr. Richard Gorlick to present the committee's annual report and recommendations.

Responding to an Oversight Committee member's question about what a clinical trials network looks like, Dr. Gorlick explained that a lead center would coordinate clinical trials activities among the created networks across Texas. Dr. Gorlick noted that a clinical trials network would not compete with the NIH funded Childhood Oncology Group but would recognize its gaps. Dr. Gorlick suggested that supporting a Texas-wide clinical trials network would improve care of children and adolescents with cancer throughout Texas.

The Oversight Committee members thanked Dr. Gorlick for the annual report presentation and his leadership as ACCC Chair.

Grant Management Support Services Contract Approval – Agenda Item 16, Tab 13

Taking agenda item 16 out of order, Presiding Officer Margo recognized Chief Operating Officer Heidi McConnell to review the proposed contract recommendation for CPRIT’s grant management support services contract. Ms. McConnell explained the recommendation for a new contract with General Dynamics Information Technology (GDIT), confirming that GDIT offers the best value for peer review support as well as a grant management platform for application receipt and review.

There were no questions for Ms. McConnell.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the grant management support services contract with GDIT for an amount not to exceed \$9,574,549.

Fiscal Year 2022 Bond Issuance Resolution – Agenda Item 17, Tab 14

Presiding Officer Margo recognized Ms. McConnell to present the FY 2022 Bond Issuance Resolution. Ms. McConnell summarized the request for financing from the Texas Public Finance Authority for FY 2022. She highlighted exhibit D showing the projected expenditure schedule for FY 2022. She explained that the agency will request \$298.1 million in FY 2022, which is close to the \$300 million cap. The request includes operations, the transfer to DSHS, and grant support.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the FY 2022 Bond Issuance Resolution.

Chief Executive Officer Report – Agenda Item 6, Tab 3

Taking agenda item 6 out of order, Presiding Officer Margo recognized Mr. Roberts to present the Chief Executive Officer’s Report. Mr. Roberts updated members on recent legislative activities, including the notice that the budget conference committee will release the General Appropriations Bill recommendations May 20. He reported that he expects the House to take up Senate Bill 713, which would move CPRIT’s sunset review year from 2023 to 2029. Mr. Roberts also noted that Oversight Committee member Dr. Rosenfeld testified that morning (May 19, 2021) on House Bill 15, which would create the Brain Institute of Texas, and that Mr. Roberts had served as a resource witness. He concluded his report by informing the members that staff is resuming discussion regarding a CPRIT conference for the summer or fall of 2022.

Scientific Research and Prevention Program Committee Appointments – Item 12, Tab 9

Taking agenda item 12 out of order, Presiding Officer Margo recognized Mr. Roberts to present his three appointments to the Scientific Research and Prevention Program Committees, listed behind Tab 9 of the meeting book.

MOTION:

On a motion made by Mr. Montgomery and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve Mr. Roberts' three appointments to CPRIT's Scientific Research and Prevention Program Committees.

Advisory Committees – Agenda Item 13, Tab 10

Presiding Officer Margo took up Agenda Item 13 again and recognized Mr. Roberts to discuss the creation of CPRIT's newest advisory committee, the Geographic Diversity Advisory Committee (GDAC), and its proposed membership. Mr. Roberts explained that CPRIT created the GDAC to advise the Oversight Committee on challenges impacting universities that are geographically remote from cancer research centers in major metropolitan areas of the state. Mr. Roberts presented the following inaugural appointments to serve on the GDAC:

- Dr. Rob Kirken, The University of Texas at El Paso
- Sarah Williams-Blangero, Ph.D., The University of Texas Rio Grande Valley
- Joseph F. Woelkers, M.A., The University of Texas at Tyler
- Dr. Ken Ramos, Texas A&M University System
- Dr. Joe Heppert, Texas Tech University
- Min Kang, Pharm.D., Texas Tech University Health Sciences Center
- Dr. Rajkumar Lakshmanaswamy, Texas Tech University Health Sciences Center El Paso
- Daniel Romo, Ph.D., Baylor University

MOTION:

On a motion made by Dr. Patel and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the new GDAC and the inaugural committee appointments.

Amendments to 25 T.A.C. Chapters 702 and 703 – Item 14, Tab 11

Presiding Officer Margo recognized CPRIT assistant general counsel Cameron Eckel to discuss the proposed administrative rule changes. Ms. Eckel reviewed the final orders on T.A.C. § 702.19(b) and § 703.10(c)(3) as originally considered at the February 17, 2021, meeting. She then presented the new proposed amendment to § 703.26 reviewed and recommended for Oversight Committee approval by the Board Governance Subcommittee which met on May 6. CPRIT will file the final orders with the Secretary of State for final adoption. CPRIT will submit the proposed change to 703.26 to the Secretary of State for publication in the *Texas Register* for public comments.

MOTION:

On a motion made by Dr. Rosenfeld and seconded by Dr. Rice, the Oversight Committee unanimously voted to approve the final order adopting rule changes to the Texas Administrative Code Chapters 702 and 703 and to approve the publication of the proposed changes to Chapter 703 in the *Texas Register*.

Communications Report – Agenda Item 18, Tab 15

Presiding Officer Margo recognized Senior Communications Specialist Chris Cutrone to present the communications update. Mr. Cutrone summarized the agency’s media relations activities, including recent press releases. He also gave an update on social media activities and discussed a video the agency produced in partnership with Moncrief Cancer Institute. He referenced the inclusion of metrics on the agency’s social media activities in his report.

Chief Operating Officer (COO) Report – Agenda Item 15, Tab 12

Presiding Officer Margo recognized Ms. McConnell to provide her COO update. Ms. McConnell reported that McConnell and Jones will provide CPRIT’s FY 2022 financial audit services for \$38,500. She also provided an update on the state audit, explaining that the State Auditor’s Office extended the completion date with a report due in August.

Subcommittee Business – Agenda Item 20

Presiding Officer Margo reminded members that in accordance with the bylaws, the Oversight Committee will elect new officers at the August 18 Oversight Committee meeting and directed any members with interest to contact him or the Nominations subcommittee. The Oversight Committee will also vote on new subcommittee assignments and CPRIT staff will contact members for their preferences. He noted that the Board Governance subcommittee and Nominations subcommittee will merge their activities in FY 2022.

- Acceptance of Gift pursuant to T.A.C. § 702.7 – Agenda Item 19**
- Compliance Investigation Pursuant to Health & Safety Code § 102.2631 – Agenda Item 21**
- Consultation with General Counsel – Agenda Item 22**

The Oversight Committee did not discuss or act related to these agenda items.

Future Meeting Dates and Agenda Items – Agenda Item 23

The next regular Oversight Committee meeting will convene on August 18, 2021.

Adjournment – Agenda Item 24

MOTION:

There being no further business, the Oversight Committee unanimously voted to approve a motion to adjourn made by Presiding Officer Margo and seconded by Mr. Montgomery.

Meeting adjourned at 12:54 a.m.

Signature

Date



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: AGENDA ITEM 5: CHIEF EXECUTIVE OFFICER REPORT
DATE: AUGUST 11, 2021

I will address the items detailed below in my Chief Executive Officer Report presented at the August 18 Oversight Committee meeting. I have attached copies of the June and July 2021 CPRIT Activity Updates behind this memo for your reference.

FY 2021 Grant Awards Funds Available and CPRIT Dashboard (Attachments 1 and 2)

CPRIT has \$174.9 million available from fiscal year 2021 appropriations for grant awards. There are sufficient funds to cover the Program Integration Committee's recommendations for all three programs that will be presented at the August 18 meeting. I have also included CPRIT's dashboard of metrics the agency tracks on a regular basis.

CPRIT's Response to COVID-19 Related Issues

CPRIT staff mostly continues to work remotely. I expected this to continue until mid-summer when a new permanent partial work from home policy would be implemented. Although the new work from home policy has been developed it has not been implemented due to the recent discouraging rise in COVID-19 cases in Central Texas and its Delta variant.

We also expected in-person Oversight Committee meetings to resume for this August 18 meeting. Again, due to the recent pandemic trend we now expect in-person meetings to resume for the November 17, 2021, meeting. We may have no other option than in-person going forward since Governor Abbott rescinded his executive order allowing state agency boards and commissions to meet via videoconference due to the pandemic.

Personnel

CPRIT currently has 34 of our 36 full-time equivalent (FTE) positions filled.

Mr. Ken Smith will start on or around September 1 in the new position of Chief Due Diligence and Patent Officer. In this role Mr. Smith will, among other things, conduct company intellectual property due diligence, manage legal issues related to technology transfer and increase opportunities to leverage intellectual property derived from CPRIT's significant research portfolio to maximize its return on investment.

Mr. Smith comes to us from his private law practice in Pennsylvania that included due diligence contract work for CPRIT. He has a BS in chemistry and an MBA from Lehigh University, an MS in biochemistry from the University of Illinois, and a PhD in biochemistry and JD from the University of Houston.

Chief Scientific Officer Search

I will update the Oversight Committee at the meeting as warranted.

241 Stellar Recruits Brought to Texas Since 2007

As of August 9, CPRIT has successfully recruited 241 eminent scholars at all career stages to Texas institutions of higher education. Using a modeling method developed by Oversight Committee member Dr. Bill Rice, these recruits represent 6,454 future research years brought to Texas by the recruitment mechanism in Academic Research since 2007.

We are on track to reach 250 recruited scholars to Texas at the August Oversight Committee meeting. In addition, during the past five years we have seen a steady increase in the number of female scholars in CPRIT's portfolio, with The University of Texas MD Anderson Cancer Center leading the way.

CPRIT has awarded **1,608** grants totaling **\$2.721 billion**

- 249 prevention awards totaling \$288.9 million
- 1,359 academic research and product development research awards totaling \$2.432 billion

Of the \$2.392 billion in academic research and product development research awards,

- 29.5% of the funding (\$718.2 million) supports clinical research projects
- 23.9% of the funding (\$582.3 million) supports translational research projects
- 29.4% of funding (\$713.6 million) supports recruitment awards
- 13.5% of the funding (\$327.7 million) supports discovery stage research projects
- 3.7% of funding (\$90.4 million) supports training programs.

CPRIT has 7 open Requests for Applications (RFAs)

- 3 Research Recruitment
- 4 Prevention

FY 2021 GRANT AWARD FUNDS AVAILABLE

General Obligation Bond Proceeds

	Prevention	Academic / Product Development Research	1% Grant Funding Buffer	Operating Budget	Total Appropriations
Available Appropriated Funds	\$ 28,035,081	\$ 254,738,136		\$ 17,226,783	\$ 300,000,000
Approved Adjustments to Operating Budget		\$ (2,933,101)		\$ 2,933,101	
Appropriations Transfer to DSHS		\$ (3,118,032)		\$ 3,118,032	
Adjusted Appropriations	\$ 28,035,081	\$ 248,687,003		\$ 23,277,916	\$ 300,000,000
Total Available for All Grants			\$ 276,722,084		
1% of Total Available Grant Funding			\$ 2,767,221		
Adjusted Grant Award Funding	28,035,081	245,919,782			273,954,863
	Prevention Grants	Academic Research Grants	PD Research Grants		
Total Available for Grant Awards (Total GO Bond Proceeds Less Operating Budget)	\$ 28,035,081	\$ 174,080,902	\$ 74,606,101		\$ 276,722,084
Total Available for Grant Awards Incorporating 1% Grant Funding Buffer	\$ 28,035,081	\$ 172,454,675	\$ 73,909,147		\$ 274,398,903
Realignment of Uncommitted Grant Funds 2021	\$ (5,435,551)	\$ 51,779,491	\$ (46,343,940)		\$ -
	\$ 22,599,530	\$ 224,234,166	\$ 27,565,207		\$ 274,398,903
Announced Grant Awards					
11/18/20 Recruitment Awards	\$ -	\$ 26,000,000	\$ -		
2/17/21 Recruitment Awards (2)		\$ 12,000,000			
5/19/21 Prevention Awards (5)	\$ 11,202,949	\$ -	\$ -		
5/19/21 Recruitment Awards (12)	\$ -	\$ 28,000,000	\$ -		
5/19/21 Research Training Awards (8)	\$ -	\$ 30,320,920	\$ -		
Announced Grant Award Subtotal	\$ 11,202,949	\$ 96,320,920	\$ -	\$ -	\$ 107,523,869
Grant Award Adjustments					
4/16/21 Declined Recruit (BCM-Iliopoulos)	\$ -	\$ (6,000,000)	\$ -		\$ (6,000,000)
6/14/21 Declined Recruit (MDA-Sheltzer)	\$ -	\$ (2,000,000)	\$ -		\$ (2,000,000)
Revised Grant Award Subtotal	\$ 11,202,949	\$ 88,320,920	\$ -		\$ 99,523,869
Uncommitted Funds as of July 14, 2021	\$ 16,832,132	\$ 84,133,755	\$ 73,909,147		\$ 174,875,034
Pending Grant Awards-PIC Recommendations					
PRV Awards	\$ 11,396,581	\$ -	\$ -		
PDR Awards (2)	\$ -	\$ -	\$ 27,565,207		
Early Clinical Investigator Awards (5)	\$ -	\$ 7,442,391	\$ -		
Core Facility Support Awards (12)	\$ -	\$ 43,099,721	\$ -		
Clinical Trials Network Award (1)	\$ -	\$ 3,000,000	\$ -		
High-Impact, High Risk Awards (28)	\$ -	\$ 6,995,235	\$ -		
Texas Clinical Trials Participation Awards (2)	\$ -	\$ 2,999,327	\$ -		
Texas Regional Excellence in Cancer Awards (2)	\$ -	\$ 11,881,670	\$ -		
Recruitment Awards (12)	\$ -	\$ 27,997,698	\$ -		
Pending Grant Award Subtotal	\$ 11,396,581	\$ 103,416,042	\$ 27,565,207		\$ 142,377,830
Total Pending Grant & Grant Funds Committed	\$ 22,599,530	\$ 191,736,962	\$ 27,565,207		\$ 241,901,699
Uncommitted Funds as of July 14, 2021	\$ 5,435,551	\$ (19,282,287)	\$ 46,343,940		\$ 32,497,204
Uncommittee Fund Adjustments	\$ (5,435,551)	\$ 51,779,491	\$ (46,343,940)		\$ -
Revised Uncommitted Funds as of July 14, 2021	\$ -	\$ 32,497,204	\$ -		\$ 32,497,204
1% Grant Funding Buffer	\$ -	\$ 1,626,227	\$ 696,954		\$ 2,323,181
Total Remaining Funds	\$ -	\$ 34,123,431	\$ 696,954		\$ 34,820,385
Operating Budget Detail					
Indirect Administration				\$ 4,828,578	
Grant Review & Award Operations				\$ 15,331,306	
Subtotal, CPRIT Operating Costs				\$ 20,159,884	
Cancer Registry Operating Cost Transfer				\$ 3,118,032	
Total, Operating Costs				\$ 23,277,916	

**CPRIT MANAGEMENT DASHBOARD
FISCAL YEAR 2021**

	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	CUMULATIVE (ANNUAL)	CUMULATIVE (TO DATE)
ACCOUNTABILITY														
Announced Grant Awards			62			2			26				90	
New Grant Contracts Signed	13	33	6	5	10	4	2	6	0	1	7		87	
New Grant Contracts In Negotiation			12			5			15				32	
Grant Reimbursements Processed (#)	208	195	209	142	128	119	242	171	181	158	130		1883	
Grant Reimbursements Processed (\$)	\$ 24,277,590	\$ 21,609,925	\$ 11,437,454	\$ 25,234,475	\$ 14,976,404	\$ 13,896,416	\$ 21,383,991	\$ 27,269,422	\$ 13,590,778	\$ 23,027,043	\$ 13,846,005		\$ 210,549,504	
Revenue Sharing Payments Received	\$ -	\$ -	\$ 44,809	\$ -	\$ -	\$ 22,845	\$ 100,000	\$ 4,550	\$ 27,439	\$ 45,100	\$ 17,153		\$ 261,897	\$ 4,926,396
Grants Awarded (#)/ Applications Rec'd (#)	18%	18%	19%	18%	18%	18%	18%	18%	18%	18%	18%			
Grantee Compliance Trainings	0	4	2	1	0	0	4	1	1	4	4		21	
Grantee Compliance Monitoring Visits	0	0	2	2	3	2	2	6	4	3	4		28	
Awards with Delinquent Reimbursement Submission (FSR)			14			2			2					
Awards with Delinquent Matching Funds Verification			0			3			2					
Awards with Delinquent Progress Report Submission			4			1			2					
MISSION														
Open RFAs	11	13	13	13	16	7	8	8	5	15	10			
Prevention Applications Received	0	12	0	0	0	22	0	0	0	0	0		34	903
Product Development Applications Received	0	0	0	0	36	0	0	0	0	0	0		36	597
Academic Research Applications Received	0	17	2	4	162	6	11	9	0	403	0		614	8,159
Help Desk Calls/Emails	85	123	72	94	225	124	139	137	235	106	143		1,483	
Number of Research Grants Announced (Annual)	0		52			2			21				75	
Recruited Scientists Contracted														232
Number of Product Development Grants Announced (Annual)			2			0			0				2	
Life Science Companies Recruited (in TX)														11
Number of Product Development Jobs Created & Maintained														738
Number of Prevention Grants Announced (Annual)			8			0			5				13	
Total Number of Education, Navigation and Training Services			177,077			132,058			174,101				483,236	
Total Number of Clinical Services			57,327			40,111			58,900				156,338	
Published Articles on CPRIT-Funded Projects (#)														
Clinical Studies (#)														160
Number of Patent Applications														
Number of Patents Resulting from Research														
TRANSPARENCY														
Total Website Hits (Sessions)	8,582	8,651	10,366	6,975	9,422	6,775	9,172	8,372	11,413	8,484	8,841			
Total Unique Visitors to Website (Users)	6,409	6,646	8,474	5,351	6,762	5,601	7,130	6,326	8,392	6,608	7,084			



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: CPRIT ACTIVITIES UPDATE FOR MAY AND JUNE 2021
DATE: JUNE 30, 2021

Topics in this memo address CPRIT activities in May and June, including recent milestones in the fight against cancer, a staffing summary, a legislative update, outreach efforts, and news from Compliance, Programs, and Operations. For your planning purposes, the Oversight Committee will meet in person August 18 at the Texas Higher Education Coordinating Board in Austin.

Recent Milestones in the Fight Against Cancer

CPRIT Grantees in the News

- On April 29 Maura L. Gillison, M.D., Ph.D., professor of medicine, Department of Thoracic/Head and Neck Medical Oncology, Division of Cancer Medicine at The University of Texas MD Anderson Cancer Center, received the David A. Karnofsky Memorial Award and Lecture at the 2021 American Society Clinical Oncology meeting. The Karnofsky award recognizes an oncologist who made outstanding contributions to cancer research, diagnosis, or treatment. Dr. Gillison is the world's foremost expert on head and neck cancers caused by the human papilloma virus (HPV). HPV accounts for 70% of oropharyngeal cancers in the United States. Dr. Gillison's recruitment to MD Anderson in 2017 from The Ohio State Comprehensive Cancer Center was enabled by a \$6 million CPRIT Established Investigator Award (RR170005).
- Banu Arun, M.D., professor, and co-medical director of the Clinical Cancer Genetics Program at The University of Texas MD Anderson Cancer Center received the American Society Clinical Oncology (ASCO) – American Cancer Society (ACS) Award May 7 during the 2021 ASCO Annual Meeting. The ASCO-ACS Award recognizes significant contributions to cancer prevention and control research or practice. Dr. Arun and colleagues showed that women who have a BRCA1 gene mutation tend to get breast cancers that are triple negative, an aggressive form of breast cancer that is difficult to treat and likely to spread and recur more than other breast cancers. CPRIT Prevention Award (PP100136) supports Dr. Arun's work to increase primary cancer provider's competence in recognizing and managing persons at higher risk for breast cancer; a CPRIT Individual Investigator Research Award (RP200383) funds her research to improve risk prediction for Li-Fraumeni syndrome, an inherited predisposition to a wide range of certain, often rare, cancers.

- Invectys, Inc. appointed Praveen Tyle, Ph.D., as President and CEO on May 4 and elected him to its Board of Directors. Invectys, based in Houston and Paris, France, received a \$14.2 million CPRIT Product Development Research award (DP200034) in 2020 to develop a CAR-T cell program targeting HLA-G - a novel immune checkpoint and tumor specific antigen for advanced clear cell renal and ovarian carcinomas.
- An article published in the May 9 edition of the *El Paso Herald-Post* featured Texas Tech University Health Sciences Center El Paso's Drs. Navkiran Shokar, Jennifer Molokwu, and Jessica Calderon-Mora and their work to treat and prevent cervical cancer along the U.S.-Mexico border. The article highlighted CPRIT-funded projects on cervical cancer screening (PP140211) and HPV vaccination (PP190058). <https://elpasoheraldpost.com/ttuhsc-el-paso-faculty-use-health-education-to-reduce-cancer-risk-in-hispanic-populations/>
- Hummingbird Bioscience, Inc. announced May 17 that the company completed its \$125 million Series C financing round. The company, based in Houston, San Francisco, and Singapore, received a \$13.1 million CPRIT Product Development Research award (DP1900027) in 2019 to develop a first-in-class anti-VISTA monoclonal antibody for the treatment of anti-tumor immunity in solid tumors and lymphomas.
- El Buen Samaritano hosted a May 22 launch celebration for the Big Pink Bus, a mobile mammography van. Ascension Seton donated the bus, which had been out of service for several years. The event recognized the fundraising and organizational efforts of stakeholders and Lone Star Circle of Care staff who have worked to transition and refurbish the mobile unit into service once again. Dr. Elizabeth Kvale's CPRIT-funded "Advancing Breast Health among Uninsured Women" project (PP200034) at The University of Texas at Austin Dell Medical School, will offer mammograms. Featured speakers included State Representative Donna Howard, Williamson County Commissioner Cynthia Long, Central Texas Addressing Cancer Together (CTX-ACT) Co-Chair Susan Dawson, and Dr. Kvale. Austin's Fox 7 and CBS 42 newscasts aired interviews from the event. The presentations are available at: <https://www.youtube.com/watch?v=xCHx1ygp40>
- Myriad Genetics, Inc. reported May 24 that it agreed to sell Myriad RBM to IQVIA, one of the largest providers of contract services to biopharmaceutical companies, for nearly \$200 million. Myriad Genetics bought Rules Based Medicine, renamed Myriad-RBM, for \$80 million in 2011. Austin-based Myriad RBM supplies contract research services for the pharmaceutical industry, including screening clinical samples against the company's menu of biomarkers. CPRIT awarded Rules Based Medicine one of its first product development research grants – a \$3 million award (RP101287) in 2010 to develop the company's Oncology MAP program.
- Asyria Therapeutics, Inc. closed its \$14.5 million Series A financing round on May 25. The Houston-based company received a \$3 million CPRIT Product Development Research award (DP200033) in 2020 to develop their lead compound, ASY-77A.

- On June 2 Austin's Fox 7 News featured Dr. Michael Pignone's CPRIT-funded colorectal cancer (CRC) screening projects at The University of Texas at Austin Dell Medical School (PP170082 and PP200066). In collaboration with CommUnityCare's safety net health clinics, Dr. Pignone leads the team behind an innovative CRC screening initiative that has distributed more than 22,000 at-home fecal immunochemical test (FIT) kits through the mail. The screening outreach initiative uses low-cost measures focused first on creating communication about the topic. Patients receive reminder mailers and telephone text messages to prompt them to follow the FIT screening process. Bilingual patient navigators helped patients with positive stool tests receive follow-up colonoscopies to find and remove precancerous polyps and detect CRC at earlier, more treatable stages. During its first year, the program doubled the percentage of patients screened for CRC from 18.4% to 37%.

Health economists at UT's LBJ School of Public Affairs studied the outcomes and costs associated with Dr. Pignone's screening initiative. Their analysis aims to measure and prove the cost-effectiveness of the screening initiative for a safety-net population, setting the stage for expanding this innovative cancer prevention model beyond Austin.

Fox 7 News story: <https://cprit.us/2Tn6yy9>

- The Salud America! Blog on June 4 discussed the dangers of secondhand smoke and highlighted the CPRIT-funded *Quitxt* program as a tobacco cessation resource. Dr. Amelie Ramirez of The University of Texas Health Science Center at San Antonio leads the *Quitxt* program (PP140176, PP170099), a bilingual service for smartphones that sends messages via [text](#) or [Facebook Messenger](#) to help coach and encourage people on the journey toward smoking cessation. <https://salud-america.org/study-long-term-exposure-to-secondhand-smoke-is-a-danger-to-brain-body/>
- Perimeter Medical Imaging AI, Inc. reported June 8 that it successfully completed the technology transfer of its manufacturing process with Minnetronix Medical for production of its optical coherence tomography (OCT) imaging systems. Perimeter created the OCT Imaging System as an imaging tool to evaluate excised human tissue microstructure. The device supplies a two-dimensional, cross-sectional, real-time depth visualization with image review manipulation software for identifying and annotating suspicious tissue. The company, based in Dallas and Ontario, received a \$7.4 million CPRIT Product Development Research award (DP190087) in 2019 to develop the optical tissue imaging system for breast conserving surgery.
- Austin-based Aeglea Biotherapeutics Inc. appointed Marcio Souza to its board of directors on June 22. Mr. Souza serves as the president and chief executive officer of Praxis Precision Medicines, Inc. Aeglea received a \$19.8 million CPRIT Product Development Research award (DP140031) in 2014 to develop an engineered human arginase targeting multiple cancer types.

Notable CPRIT-Supported Research Accomplishments

- Aravive, Inc. reported April 27 that clinicians dosed the first patient in the Phase 3 trial of AVB-500 in platinum resistant ovarian cancer. Aravive followed up with plans announced in early May to start the Phase 1b trial in the second half of 2021 to study AVB-500 as a first-line treatment of pancreatic cancer. The company also released data June 24 that showed positive early results from the Phase 1b part of its Phase 1b/2 study in patients with clear cell renal cell carcinoma (advanced stage kidney cancer) dosed with AVB-500 in combination with cabozantinib. CPRIT approved a \$20 million Product Development Research award (DP150127) in 2015 for the Houston and Palo Alto-based company to develop AVB-500.
- Aeglea Biotherapeutics Inc. announced May 3 that it has completed patient randomization for PEACE (Pegzilarginase Effect on Arginase 1 Deficiency Clinical Endpoints), the pivotal Phase 3 clinical trial investigating pegzilarginase for the treatment of Arginase 1 Deficiency. The Austin-based company received a \$19.8 million CPRIT Product Development Research award (DP140031) in 2014 to develop an engineered human arginase targeting multiple cancer types.
- Zhiqiang An, Ph.D., professor at The University of Texas Health Science Center at Houston, and Pei-Yong Shi, Ph.D., The University of Texas Medical Branch at Galveston, and their colleagues have engineered a new therapeutic antibody with high potency against the SARS-CoV-2 (COVID-19) virus, including activity against new SARS-CoV-2 variants. Clinicians will administer the new antibody formulation by nasal spray, supplying direct access to the nasal passages and lungs - the primary sites of virus infection. The preclinical studies in mice suggest that the new antibody may work even better than existing antibody treatments to fight COVID-19, especially now that new SARS-CoV-2 “variants of concern” have become increasingly prevalent. CPRIT Core Facility Support Awards RP150551 and RP190561 aided the investigators’ research, which they reported in the June 3 edition of the journal *Nature*. The researchers have licensed this new antibody to IGM Biosciences for further development and future testing in a clinical trial.
- Scientists have long known that hypoxia, or a lack of oxygen, is a characteristic of cancerous tissue. The more hypoxic a tumor, the worse it tends to respond to chemotherapy and radiation. CPRIT-supported researchers (RP140285), led by The University of Texas Southwestern Medical Center Professor Ralph Mason, used a type of magnetic resonance imaging to show in an animal model that the level of oxygen in tumors predicts the tumors that will respond well to radiation therapy. The findings, published June 9 by the *International Journal of Radiation Oncology, Biology and Physics*, may offer a way to personalize therapy for patients who receive radiation to treat cancers.
- Researchers at The University of Texas MD Anderson Cancer Center have developed a first-of-its-kind tool that accurately discerns rare groups of biologically important cells from single-cell datasets obtained from cancers, which often have gene or protein expression data from thousands of cells. The research, published May 20 in the journal *Nature Computational Science*, describes the new computational tool SCMER (Single-Cell Manifold

presERving feature selection). SCMER is an AI-based tool designed to help researchers sort through the noise of complex datasets to study cells that would likely not be identifiable otherwise. It has the potential for broad use in many applications in oncology, including the study of minimal residual disease, drug resistance and distinct populations of immune cells invading a cancer. Ken Chen, Ph.D., associate professor of Bioinformatics and Computational Biology at MD Anderson, led the development of SCMER, which a CPRIT Individual Investigator Research Award for Computational Biology (RP180248) helped fund.

Personnel

CPRIT has filled 34 of our 36 full-time equivalent (FTE) positions. We are working on job postings for the eight new FTE positions authorized by the legislature as well as for a new due diligence officer.

Chief Scientific Officer Search

The Chief Scientific Officer interview team met June 8 to decide the list of candidates for formal interviews. Formal candidate interviews with the six finalists will occur in early July with the full CSO interview team. During the week of June 21, Dr. Willson and I met by videoconference with each of the six candidates invited for formal interviews to give more insight about the day-to-day requirements of the CSO position and answer their CPRIT questions. I will update the Oversight Committee as developments warrant.

CPRIT Outreach

Staff outreach activities during May and June include:

- Chief Product Development Officer Dr. Cindy WalkerPeach presented an update on CPRIT and available funding opportunities for early-stage cancer companies on May 10 at the Second Annual Gulf Coast Consortia Innovative Drug Discovery and Development Conference.
- Chief Prevention Officer Ramona Magid attended the second week of the American Association for Cancer Research Annual Meeting 2021, held virtually May 17 – 21. AACR is the world’s oldest and largest professional associated related to cancer research.
- Chief Strategic Initiatives and Intellectual Property Officer Tracey Davies presented “Technology Transfer Today: How the Biotech Revolution Has Transformed IP, Ethics and the Development of New Therapies” to the Dallas Bar Association on May 24. She co-presented with Dr. Clair Aldridge, Scientific Advisor at Biotech+ Hub at Pegasus Park.
- On May 25 Ms. Davies attended the quarterly meeting for the members of the Collaborators Committee for The University of Texas at Arlington Center for Entrepreneurship &

Economic Innovation. She is a member of the Collaborators Committee, which offers strategic insight to the Executive Director and UTA leadership on initiatives intended to generate startup activity and spur innovative economic development that can have meaningful and lasting impact.

- Senior Program Manager for Product Development Rosemary French attended the Texas Venture Mentoring Service virtual luncheon hosted by the Austin Technology Incubator at The University of Texas at Austin on May 26.
- Senior Program Manager for Academic Research Dr. Patty Moore attended the *Outstanding Women in Texas Government Awards* virtual event on June 8 sponsored by the Governor's Commission on Women and the State Agency Council. Texas First Lady Cecilia Abbott kicked off the event.
- On June 9 Ms. Magid attended the meeting of the Cancer Alliance of Texas' Colorectal Cancer Screening working group.
- Dr. WalkerPeach, Ms. Davies, and Ms. French attended the BIO Digital 2021 conference held virtually June 10-18. As part of the event, Dr. WalkerPeach was a speaker on the interactive panel "Biotechnology State Economic Development Post-COVID: Where Public-Private Partnerships Succeed." During BIO's One-2-One partnering event, Ms. French, Ms. Davies and Dr. WalkerPeach met virtually with more than fifty parties interested in CPRIT's product development program, including potential applicants, cancer-focused non-profits, business accelerator leaders, and angel, venture capital and strategic investment groups.
- Ms. Magid hosted two interactive online sessions June 16 and 18 giving an overview of FY 2022 prevention program funding opportunities. The June 18 video session highlighted the new RFA for Prevention Program Assessment, which seeks applications to evaluate the progress since 2010 and develop an assessment plan for the next stage of the CPRIT Prevention Program.
- Dr. WalkerPeach and Ms. French hosted an informational webinar June 23 for the first cycle of Product Development RFAs for fiscal year 2022. David Shoemaker, Deputy Chair of the Product Development Review Council, and Jim Jordan, Product Development peer review panel member, also offered insights on the elements of a good application. Ninety-eight participants attended the interactive webinar - record attendance for a product development webinar - and included several CPRIT-funded academic research faculty, private startup company funders as well as large pharma and medical device company representatives.
- Several staff members and I met on June 30 with representatives of the Nuclear Energy eXperimental Testing Research Alliance (NEXTRA). NEXTRA is a consortium of Abilene Christian University, Georgia Institute of Technology, The University of Texas at Austin, and Texas A&M University that is exploring use of a molten salt research reactor for developing medical isotopes for diagnosing and treating cancer, among other things. Former state representative Jim Keffer arranged the meeting.

2021 Legislative Session Recap

The 87th Texas Legislature adjourned *Sine Die* May 31. This was an extremely successful session for CPRIT. The appropriations bill, Senate Bill 1, approved by the House and Senate on May 27 and signed into law by Governor Abbott on June 18, provides CPRIT's full, constitutionally authorized annual appropriations of \$300 million for fiscal years 2022-2023, less the required \$3.1 million per year to the Cancer Registry at the Department of State Health Services. SB 1 also adopted all CPRIT's requested exceptional budget items.

The budget approval for CPRIT is a definite sign of confidence in CPRIT and shows the legislature's strong faith in the agency, our mission, and your leadership. The passage of Senate Bill 713, which pushed back CPRIT's scheduled 2023 sunset review until 2029, is further evidence of the legislature's trust in CPRIT and its mission.

I summarize below CPRIT's exceptional budget items and the outcome of notable legislation that we were following this session.

Senate Bill 1

In addition to full funding for CPRIT, SB 1 also adopted CPRIT's requested exceptional items:

- Base Adjustment for Ongoing Operating Costs

The approved state budget incorporated all CPRIT's requested adjustments for ongoing operating costs, including the Statewide Cost Allocation Plan (SWCAP) charge that we added to our budget request as a new exceptional item after the legislative session started. The amended request was necessary because the Comptroller Office's notified CPRIT in early January of a 551% increase in CPRIT's fiscal year 2020 Statewide Cost Allocation Plan (SWCAP) amount. Upon CPRIT's request, the Governor's Office confirmed the amount, explaining that the increase reflects CPRIT use of the state's Centralized Accounting and Payroll/Personnel System (CAPPS) Financial module for our accounting and procurement processes. CPRIT began using CAPPS in fiscal year 2018. CPRIT will continue to use the CAPP's financial module and must account for the new, higher SWCAP allocation in its budget going forward.

- Eight Full-Time Equivalent Positions

The budget for the 2022-2023 biennium allows CPRIT to increase the agency's full-time equivalent (FTE) positions by eight – for a total of 44 FTE positions - beginning fiscal year 2022. CPRIT will use the new FTE positions to expand accounting/compliance staff and to address program workload requirements. CPRIT has more than 550 current grants totaling \$1.4 billion under active grant management. The new positions add more resources dedicated to compliance, fiscal, and program monitoring.

- Budget Transfer Authority

Since 2013, the Legislative Budget Board (specifically the Chairs of House Appropriations and Senate Finance, the Lieutenant Governor, and the Speaker) must each individually approve a CPRIT transfer request before the agency may transfer appropriated funds between budget line items. These transfer requests are generally routine and non-controversial but necessary to keep operational stability. However, because of the multiple signoffs needed for approval, CPRIT's budget transfer requests have languished administratively for months, with a recent request taking more than 115 days to receive approval. CPRIT submitted a request on March 26 related to the 2021 SWCAP that is still pending approval.

Beginning in fiscal year 2022, the approved budget authorizes CPRIT's CEO, with Oversight Committee approval, to transfer up to 20 percent from one line item to another. Although CPRIT must report the transfer to the LBB, SB 1 does not require other approval before the transfer may occur. This is the standard budget transfer provision for most state agencies.

- CSO Exempt Salary Increase

The final budget includes CPRIT's requested 10% increase to the Chief Scientific Officer's salary (from \$553,500 to \$608,850.) The legislature last approved a significant increase in the CSO salary during the 2013 legislative session when it did away with the CPRIT Foundation and the CSO salary supplement the foundation provided. The CSO salary approved by the 2013 legislature was on par with similar positions in the Texas higher education salary scheme at the time. However, over the past eight years the salaries for comparable cancer center positions increased substantially while the CPRIT CSO's salary remained relatively unchanged. Left unaddressed, the substantial difference risked CPRIT's ongoing ability to attract and keep individuals in the CSO position with qualifications and reputations like the preeminent individuals that have served CPRIT since its start.

CPRIT-Related Legislation and Other Notable Legislation

- [Senate Bill 74/House Bill 4241](#) (companions)

Senator Borris Miles and Representative Jacey Jetton filed legislation amending CPRIT's statute (Tex. Health & Safety Code §102.255(d)) to allow research institutions or their affiliated centers to use the federal indirect rate as a credit to offset CPRIT's matching requirement. The credit is already available to institutions of higher education as defined by the Texas Education Code, but the proposed amendment addressed research institutions that do not qualify under Education Code designation.

Outcome: The Senate Committee on Health & Human Services took testimony on SB 74 on April 28 and left the bill pending; HB 4241 did not receive a committee hearing.

- [Senate Bill 713/House Bill 1860](#) (companions)
Representative John Cyrier and Senator Dawn Buckingham, in their respective roles as Chair and Vice Chair of the Sunset Commission, introduced legislation to reorder several upcoming agency sunset reviews. The legislation changes CPRIT’s sunset review date from August 31, 2023, to August 31, 2029.

Outcome: The Senate and the House of Representatives voted to adopt the conference committee report for SB 713 on May 30 and Governor Abbott signed the legislation into law on June 16.

- [Senate Bill 1563/House Bill 3579](#) (companions)
Senators Juan “Chuy” Hinojosa and Eddie Lucio and Representative R.D. “Bobby” Guerra filed companion legislation to make significant changes to CPRIT’s enabling legislation, including allowing the Oversight Committee to consider and approve any application for grant awards, even those applications not recommended after peer review. The proposed legislation also appeared to alter the distribution of prevention grant funds by requiring that CPRIT give the funding to specified counties rather than project leaders, even if there is no apparatus in the county to complete the project.

Outcome: Neither SB 1563 nor HB 3579 received a committee hearing.

- [House Bill 2252](#)
Representative Oliverson filed legislation that would prohibit CPRIT from awarding a grant to an applicant that plans to buy organs from a hospital in China. The bill also required CPRIT to add a written contract certification that the grantee will not use grant funds to buy organs from a hospital in China for all awards, including those made prior to the effective date of the bill.

Outcome: HB 2252 did not receive a committee hearing.

- [House Joint Resolution 5](#) and [House Bill 15](#)
Representative Senfronia Thompson filed legislation to create the Brain Institute of Texas. The proposed legislation was based upon the CPRIT template, including a statewide vote to issue \$3 billion in bond funding to support the initiative. Senator Lois Kolkhorst, chair of the Senate Health & Human Services Committee, signed on as Senate sponsor of HB 15 on May 17 and laid out a committee substitute for HB 15 when the committee considered the legislation May 19. The committee substitute significantly changed the original legislation and reduced the funding commitment, replacing the Brain Institute of Texas with the Texas Brain University Research Initiative funded through appropriation of general revenue.

Outcome: The House approved HJR 5 on April 27 (114 Ys, 33 Ns, 1 Present, not voting) and HB 15 on April 28 (107 Ys, 36 Ns, 1 Present, not voting.) The Senate Health & Human Services Committee approved the HB 15 committee substitute on May 22. The legislation was placed on the Senate intent calendar for consideration May 25, but the Senate did not take up the legislation before the 87th Legislative Session adjourned *Sine Die*.

- [Senate Joint Resolution 17](#) and [Senate Bill 264](#)
Senator Jose Menéndez filed legislation to create the Texas Research Consortium to Cure Infectious Diseases (TRANSCEND) with a \$3 billion constitutional bond authorization. Senator Menéndez explained that he intends CPRIT to serve as a model for the new agency.

Outcome: SJR 17 and SB 264 did not receive committee hearings.

Compliance Program Update

Submission Status of Required Grant Recipient Reports

CPRIT has \$1.4 billion in active grants under management, with 560+ grants that are either active or wrapping up grant activities. We receive an average of 560 grantee reports each month. As of June 23, five entities had not filed two Academic Research reports, one Prevention report, and four Product Development Research reports. CPRIT's grant accountants and compliance specialists review and process incoming reports and reach out to grantees to resolve filing issues. In most cases, CPRIT does not disburse grant funds until the grantee files the required reports. In some instances, grantee institutions may be ineligible to receive a future award if the grantee does not file the required reports.

Financial Status Report Reviews

CPRIT's compliance specialists performed 337 second-level reviews of grantee Financial Status Reports (FSRs) in May and June. Twenty-six FSRs (8%) needed resubmission due to insufficient or inaccurate documentation sent by the grantee. CPRIT's grant accounting staff completes the first review of the FSRs and supporting documentation before routing them to the compliance specialists for final review and disposition.

Single Audit Tracking

Compliance specialists track the submission of grantees' independent audit reports and the resolution of issues named in these reports. Grantees who spend \$750,000 or more in state awards in the grantee's fiscal year must undertake a single independent audit, a program specific audit, or an agreed upon procedures engagement. The grantee sends the independent audit report with findings to CPRIT within 30 days of receipt, but no later than nine months after the grantee's fiscal year end.

Currently, all grantees have sent in required audits. Grantees are unable to receive reimbursements or advances if they are delinquent in filing the required audit and corrective action plan unless the grantee requests more time by the due date of the required audit and CPRIT's CEO approves the request.

Desk Reviews

Compliance specialists performed eleven enhanced desk-based financial monitoring reviews in May and June. Enhanced desk reviews verify that grantees spend funds in compliance with specific grant requirements and guidelines and may target an organization's internal controls, current and past fiscal audits, and timeliness of required grantee report submission. Compliance specialists are working with two grantees to remediate enhanced desk review findings.

Onsite Reviews

CPRIT completed seven virtual onsite reviews in May and June. Onsite reviews examine the grantee's financial and administrative operations, subcontract monitoring, procurement and contracting procedures, inventory procedures, personnel policies and procedures, payroll and timesheet policies, travel policies and records, and single audit compliance. Compliance specialists are working with three grantees to remediate onsite review findings.

Match Expenditures Review

CPRIT requires academic research and product development research grantees to show that they have available unused funds equal to at least one-half of the CPRIT grant award that the grantee will spend on the CPRIT-funded project. This obligation, often referred to as "CPRIT's matching funds requirement," requires the grantee to first certify that it has available matching funds, and then at the end of the grant year, to verify that the grantee spent the matching funds on the project. CPRIT's statute allows an institution of higher education to use its federal indirect cost rate as a credit toward the required 50% match.

Product development grantees plus those academic research grantees whose indirect cost rate credit does not fully offset the required match must supply a detailed match expenditure report that includes the amount and date paid, vendor, description, and budget category. Compliance staff review grantees' match expenditures for appropriateness and allowability and work with CPRIT's grant accountants and the grantee to address any deficiencies. Compliance staff performed three annual match expenditure reviews for two grantees in May and June. The total amount of match expenses reviewed by compliance staff for FY 2021 is \$13,948,139.24.

Training and Support

CPRIT staff conducted two new grantee training webinars in May and June for Barricade Therapeutics and Texas A&M University-Corpus Christi. Per Texas Administrative Code §703.22, CPRIT requires new grantees to complete the first compliance training program prior to receiving disbursement of grant award funds.

CPRIT staff conducted a series of Annual Compliance Training webinars on June 9-10 for 180 grantee staff. Trainings are specific to each program area (Academic Research, Product Development Research, and Prevention) and allow for an interactive experience and opportunity to focus on topics relevant to each program. The trainings covered grant reporting requirements,

administrative rule changes, grant closeout, and an overview of the compliance program including fraud, waste, and abuse reporting. This was the second training series offered this year for the annual compliance training requirement which requires the Authorized Signing Official (ASO) and at least one other employee from each grantee organization to attend an annual compliance training by December 31 of each year.

Academic Research Program Update

FY 2021 Recruitment Applications

CPRIT’s Scientific Review Council (SRC) met May 13 and June 10 and will meet July 8 to review recruitment applications filed for cycles 21.10 - 21.12. Dr. Willson will present the SRC’s recommendations to the Program Integration Committee (PIC) and the Oversight Committee in August.

FY 21.10 - 21.11 Mechanism	Received	Funds Requested	Proposed by SRC	Funds Proposed by SRC
Recruitment Established Investigators	3	\$18,000,000	1	\$6,000,000
Recruitment of Rising Stars	3	\$11,998,389	2	\$7,998,389
Recruitment of First-Time, Tenure Track Faculty Members	16	\$31,290,005	8	\$15,999,309
TOTAL	22	\$61,288,394	11	\$29,997,698

FY 2021 Review Cycle 2 (21.2)

CPRIT released six academic research RFAs in August 2020 and began accepting applications for the 21.2 review cycle September 16, 2020. In addition to Core Facility Support Awards, High Impact/High Risk Awards, and Early Clinical Investigator Awards, the 21.2 review cycle includes several new RFAs, including the new Clinical Trials Network Award, Texas Clinical Trials Participation Program Award, and Texas Regional Excellence in Cancer Award. Applicants filed 159 proposals by the January 27 deadline. Peer review panels met in late May to review the applications. Dr. Willson will present the SRC’s recommended research awards to the PIC and the Oversight Committee for consideration in August.

FY 2021 RFA Mechanism	Received	Funds Requested
Core Facility Support Awards	25	\$95,848,572
Clinical Trials Network Awards	5	\$13,481,740
Early Clinical Investigator Awards	11	\$16,426,401
High-Impact/High Risk Awards	107	\$26,501,441
Texas Clinical Trials Participation Program Awards	4	\$5,982,538
Texas Regional Excellence in Cancer Awards	7	\$41,786,641
Total	159	\$200,027,333

FY 2022 Cycle 1 RFAs

CPRIT released the first five RFAs for FY 2022 grant awards on January 13. CPRIT received 403 applications for the first cycle of FY 2022 (22.1) research awards by the June 2 deadline. Peer review panels will meet in October virtually to evaluate the applications and make grant award recommendations. The Chief Scientific Officer will present the SRC's recommendations to PIC and the Oversight Committee in February 2022.

FY 2022 Cycle 1 RFA Mechanism	Received	Funds Requested
Individual Investigator Research Awards	282	\$285,494,299
Individual Investigator Research Awards for Cancer in Children and Adolescents	50	\$67,884,165
Individual Investigator Research Awards for Clinical Translation	27	\$52,079,326
Individual Investigator Research Awards for Computational Systems Biology of Cancer	21	\$23,825,931
Individual Investigator Research Awards for Prevention and Early Detection	23	\$44,112,406
Total	403	\$473,396,127

The 22.1 Cycle RFA Mechanisms

- *Individual Investigator Research Awards (IIRA)*
Supports applications for innovative research projects addressing critically important questions that will significantly advance knowledge of the causes, prevention, and/or treatment of cancer. Areas of interest include laboratory research, translational studies, and/or clinical investigations. Competitive renewal applications accepted.
Award: Up to \$350,000 per year. Exceptions allowed if extremely well justified; maximum duration: 3 years.
- *Individual Investigator Research Awards for Computational Systems Biology of Cancer (IIRACSB)*
Supports applications for innovative mathematical and/or computational research projects addressing questions that will advance current knowledge in the (a) mechanisms that tie altered gene expression and downstream molecular mechanisms to functional cancer phenotypes and/or (b) mechanisms that tie tumor morphology to functional cancer phenotypes and/or mechanisms that tie treatment sequence and combination to evolving functional cancer phenotypes (that emerge as a result of treatment selection).
Award: Up to \$400,000 in total costs per year. Exceptions allowed if extremely well justified; maximum duration: 3 years.
- *Individual Investigator Research Awards for Cancer in Children and Adolescents (IIRACCA)*
Supports applications for innovative research projects addressing questions that will advance knowledge of the causes, prevention, progression, detection, or treatment of cancer in children and adolescents. Laboratory, clinical, or population-based studies are all acceptable. CPRIT expects the outcome of the research to reduce the incidence, morbidity, or mortality

from cancer in children and/or adolescents in the near or long term. Competitive renewal applications accepted.

Award: Up to \$350,000 per year. Applicants that plan to conduct a clinical trial as part of the project may request up to \$500,000 in total costs. Exceptions allowed if extremely well justified; maximum duration: 4 years.

- *Individual Investigator Research Awards for Prevention and Early Detection (IIRAP)*
Supports applications which propose clinical and population-based projects designed to develop effective prevention and early detection interventions to reduce cancer risk, mortality, and morbidity among Texans. Projects that propose such research collaborations with existing CPRIT Prevention Program awardees including the CPRIT funded *Texas Collaborative Center for Hepatocellular Cancer* (<https://www.bcm.edu/research/labs-and-centers/research-centers/texas-collaborative-center-for-hepatocellular-cancer>) are strongly encouraged.
Award: Up to \$500,000 per year. Exceptions allowed if extremely well justified; maximum duration: 4 years.
- *Individual Investigator Research Awards for Clinical Translation (IIRACT)*
Supports applications that propose innovative cancer clinical studies that are hypothesis driven and involve patients enrolled prospectively on a clinical trial. Areas of interest include clinical studies of new or repurposed drugs, hormonal therapies, immune therapies, surgery, radiation therapy, stem cell transplantation, combinations of interventions, or therapeutic devices.
Award: Up to \$500,000 per year. Exceptions allowed if extremely well justified; maximum duration: 4 years.

Product Development Research Program Update

FY 2021 Product Development Research RFAs

CPRIT released three Product Development RFAs on November 9 seeking applications for the Texas Company, Relocation Company, and Seed Company awards and received 35 eligible applications by the January 27 deadline. After the Product Development peer review panels met by videoconference on March 22 – 23 for initial peer review, eight companies moved forward to live presentations via videoconference, held April 19 – 21. Following the company presentations, the peer review panels recommended five applications for due diligence review.

The Product Development Review Council (PDRC) will meet in July to review the due diligence reports and make final recommendations. Dr. WalkerPeach will present the PDRC's award recommendations to the PIC and the Oversight Committee in August.

FY 2021 Mechanism	Received	Funds Requested	Live presentations	Funds Requested	Rec'd for Diligence	Funds Requested
Texas Company	8	\$99,869,430	3	\$41,849,848	3	\$41,849,848
Relocation Company	6	\$97,956,112	2	\$35,568,812	1	\$19,978,500
Seed Company	21	\$55,118,837	3	\$8,988,950	1	\$3,000,000
TOTAL	35	\$252,944,379	8	\$86,407,610	5	\$64,828,348

FY 2022 Cycle 1 (22.1) Product Development Research RFAs

CPRIT released three product development RFAs on May 27 for the first cycle of FY 2022. On June 23 Dr. WalkerPeach and Ms. French hosted a webinar giving an overview of the Cycle 22.1 Product Development RFAs and tips for putting together a good application. The application portal opened on June 24 to receive applications and will close August 4. Dr. WalkerPeach will present 22.1 award recommendations to the PIC and the Oversight Committee in February.

- Texas Company Product Development Research Award (TXCO)*
 Supports early-stage "startup" and established companies in the development of innovative products, services, and infrastructure with significant potential impact on cancer patient care. The proposed project must further the development of new products for the diagnosis, treatment, or prevention of cancer; must set up infrastructure that is critical to the development of a robust cancer biotech industry; or must fill a treatment or research gap. Companies must headquarter in Texas.
 Award: Up to \$20 million over three years.
- Company Relocation Product Development Award (RELCO):*
 The goal of this award mechanism is to recruit to Texas companies with proven management teams focused on exceptional product opportunities to improve cancer care. The award supports early stage "startup" and established companies in the development of innovative products and services with significant potential impact on cancer patient care. The proposed project must further the development of new products or services for the diagnosis, treatment, or prevention of cancer; must foster a robust biotechnology industry ecosystem; or must fulfill a critical unmet need in cancer patient care.
 Award: Up to \$20 million over three years.
- Seed Award for Product Development Research (SEED):*
 Supports early-stage "startup" companies in the development of innovative products, services, and infrastructure with significant potential impact on cancer patient care. The proposed project must further the development of new products for the diagnosis, treatment, or prevention of cancer; must set up infrastructure that is critical to the development of a robust cancer biotech industry; or must fill a treatment or research gap.

Award: Up to \$3 million over three years.

Prevention Program Update

FY 2021 Cycle 2 (21.2) Prevention RFAs

CPRIT released four 21.2 RFAs (listed below) in October 2020. CPRIT received 22 applications requesting \$24.5 million by the February 10 deadline. Peer reviewers met April 26-29 to evaluate the applications. The Prevention Review Council (PRC) met May 27 and June 17 to consider the applications. Ms. Magid will present the PRC’s 21.2 recommendations for eleven awards totaling \$11.4 million to the PIC and the Oversight Committee in August.

21.2 Grant Mechanism	Received	Funds Requested	Recommended by PRC	Recommended Funding
Dissemination of CPRIT-Funded Cancer Control Interventions	4	\$ 1,198,638	3	\$ 899,960
Evidence-based Cancer Prevention Services	10	\$ 9,724,716	1	\$1,000,000
Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations	3	\$ 6,580,487	2	\$4,497,017
Tobacco Control and Lung Cancer Screening	5	\$ 6,973,002	3	\$4,999,604
TOTAL	22	\$24,476,843	9	\$11,396,581

FY 2022 Cycle 1 (22.1) Prevention RFAs

CPRIT released four RFAs on May 7 for the first cycle of FY 2022. Applications are due September 1, with peer review taking place in December. Ms. Magid will present the PIC’s recommendations for cycle 22.1 awards to the Oversight Committee in February 2022.

- Evidence-Based Cancer Prevention Services*
 Seeks projects that will deliver evidence-based cancer prevention and control clinical services. CPRIT will give priority to projects that propose to address CPRIT areas of emphasis and serve areas of the state not well addressed by current CPRIT funded projects.
 Award: Up to \$1 million over 36 months.
- Tobacco Control and Lung Cancer Screening*
 Seeks programs on tobacco prevention and cessation, as well as screening for early detection of lung cancer. Through release of this RFA, CPRIT’s goal is to stimulate more programs across the state, thereby supplying greater access for underserved populations and reducing the incidence and mortality rates of tobacco-related cancers. This RFA promotes the delivery of evidence-based programming designed to significantly increase tobacco cessation among adults and/or prevent tobacco use by youth.
 New Award: Up to \$1 million over 36 months.

- *Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations*
Seeks to support coordination and expansion of evidence-based services to prevent cancer in underserved populations who do not have adequate access to cancer prevention interventions and health care, bringing together networks of public health and community partners to carry out programs tailored for their communities. Projects should name cancers that cause the most burden in the community and use evidence-based models shown to work in similar communities to prevent and control these cancers. Currently funded CPRIT projects should propose to expand their programs to include more types of prevention clinical services and/or an expansion of current clinical services into more counties. In either case, the expansion must include delivery of services to nonmetropolitan and medically underserved counties in the state.

Initial Expansion Award: Up to \$2 million over 36 months.

Subsequent Expansion Award: Up to \$2.5 million over 60 months.

- *Prevention Program Assessment*
Seeks applications for one project to assess the progress of the CPRIT Prevention Program since 2010 and to develop an assessment plan for the next stage of the CPRIT Prevention Program. The evaluation will use a mixed-methods approach that combines quantitative and qualitative data to supply evidence of effectiveness and information about how organizations and populations implement and sustain CPRIT-related changes. CPRIT will use evaluation findings to improve program effectiveness and to inform decisions about future program development.

Award: Up to \$750,000 over 24 months

Advisory Committee Meetings

Several CPRIT advisory committees met in June via videoconference.

- The Clinical Trial Advisory Committee met June 21 to prepare for its annual presentation to the Oversight Committee on August 18
- The University Advisory Committee met June 28
- The Advisory Committee on Childhood Cancer met June 28
- The Geographical Diversity Advisory Committee held its first meeting June 29

Operations, Audit and Finance Update

Audits

The State Auditor's Office audit team wrapped up their field work on the grant management audit this month. They plan to deliver a draft audit report to CPRIT in early August and expect releasing the final report in September.

CPRIT's internal auditor (Weaver) is performing field work for the IT general computer controls audit, governance audit follow-up, business continuity planning advisory follow-up, and the records management (grantee compliance records) audit advisory. Weaver will complete these audits and advisory engagements by the end of the summer.

Services Contracts

I requested that the Legislative Budget Board approve CPRIT's FY 2022 grant management support contract for approximately \$9.6 million with GDIT, which the Oversight Committee approved at its May meeting. LBB approval is necessary because the GDIT contract exceeds the \$1 million threshold in the General Appropriations Act.

Communications Update

Media Highlights and Highlights

- The University of North Texas Health Science Center at Fort Worth's training grant awarded at the May Oversight Committee meeting received coverage in the *Dallas Morning News*, *Dallas Innovates* and *Fort Worth Business Press*. Senior Communications Specialist Chris Cutrone worked with reporter Morgan Gonzales on background for the *Dallas Morning News* article. "HSC Awarded CPRIT Grant To Increase Diversity in Cancer Researchers," May 28, 2021, *Dallas Innovates* <https://dallasinnovates.com/forces-for-good-hsc-awarded-cpr-it-grant-to-increase-diversity-in-cancer-researchers/>
- The *San Antonio Express News* and the *San Antonio Report* featured Pelican/Heat Biologics' expansion of their local operations. "San Antonio officials entice biomedical venture with tax breaks," June 5, 2021, *San Antonio Express-News* <https://www.expressnews.com/news/local/article/San-Antonio-officials-entice-biomedical-venture-1622230.php>
- The *Dallas Morning News*, *Dallas Innovates* and the *Dallas Business Journal* covered OncoNano's \$50 million Series B financing round. Mr. Cutrone worked with OncoNano's media relations for the *Dallas Morning News* story. "Southlake company announces funding round of roughly \$50 million," June 17, 2021, *Dallas Business Journal* <https://www.bizjournals.com/dallas/news/2021/06/17/southlake-biotech-firm-onconano-medicine-funding.html>
- MD Anderson spinout Tvardi received coverage in *Fierce Biotech* for raising \$74 million in venture capital. Four CPRIT grants to David Twardy, M.D., chair of the internal medicine division at MD Anderson, supported the STAT3 inhibitor research that is the basis of the company. Dr. Twardy co-founded Texas-based Tvardi with former MD Anderson President Dr. Ron DePinho. Both sit on Tvardi's scientific advisory board with Nobel laureate and CPRIT Scholar Dr. James Allison. 06/23/21 – "Tvardi snags \$74M to weed the tumor garden

with STAT3 inhibitor” – *Fierce Biotech* <https://www.fiercebiotech.com/biotech/tvardi-snags-series-b-to-bring-stat3-inhibitor-candidate-into-multiple-clinical-trials-next>

Social Media Statistics

- Twitter (June 1 – June 28)

Total Tweets: 6
Tweet Impressions: 9,015
Profile Visits: 2,082
Mentions: 214
New Followers: 36 (2,909 total)

Top tweet: Congrats to CPRIT [#Scholar @veiseho](#) for this collaboration. Dr. Veiseh was recruited to [@RiceUniversity](#) through a Recruitment of First-Time, Tenure-Track Faculty Members award. Check out his [#Scholar](#) profile to learn more: <https://cprit.us/3h1mdLs>

Impressions: 2,038
Engagements: 29

- LinkedIn (May 28 – June 27)

Total Updates: 16
Post Impressions: 13,700
Reactions: 281
Shares: 6
Page views: 162
Unique Visitors: 80
New followers: 9 (1,271 total)

Top Update: More great CPRIT [#Scholar](#) news coming out of [Rice University](#) this week. K.C. Nicolaou, in collaboration with [AbbVie](#) has created an antibody-drug conjugate that also kills non-targeted neighboring tumor cells. Check out the press release to learn more: <https://cprit.us/3vQZasq>

Impressions: 18,086
Clicks: 999
Reactions: 313
Engagement rate: 7.36 %

- Facebook (May 31 – June 27)

Reach: 461 people
Engagement: 126 reactions/clicks
Page Views: 92

Top Post: Congrats to CPRIT #Scholar Dr. Omid Veiseh for this collaborative study examining how breast implant surfaces affect immune response. Dr. Veiseh was recruited to Rice University through a Recruitment of First-Time, Tenure-Track Faculty Members award. Check out his [#Scholar](#) profile to learn more: <https://cprit.us/3h1mdLs>

Post Reach: 169 people

Engagement: 4 clicks, 103 reactions, 6 shares

Upcoming Subcommittee Meetings

Listed below are the subcommittee meetings in advance of the August 18 Oversight Committee meeting.

Board Governance	August 5 at 10:00 a.m.
Audit	August 9 at 10:00 a.m.
Prevention	August 10 at 10:00 a.m.
Academic Research	August 11 at 10:00 a.m.
Product Development	August 12 at 10:00 a.m.
Nominations	August 13 at 10:30 a.m.

We will send instructions for signing onto the Zoom platform along with the subcommittee agenda and meeting materials one week prior to the meeting date. Please plan to join the subcommittee meeting a few minutes early so we can address any technology issues before the meeting start time.

The August 18 Oversight Committee meeting will be an in-person meeting at the Texas Higher Education Coordinating Board in Austin.

CPRIT has awarded **1,608** grants totaling **\$2.721 billion**

- 249 prevention awards totaling \$288.9 million
- 1,359 academic research and product development research awards totaling \$2.432 billion

Of the \$2.432 billion in academic research and product development research awards,

- 29.5% of the funding (\$718.2 million) supports clinical research projects
- 23.9% of the funding (\$582.3 million) supports translational research projects
- 29.4% of funding (\$713.6 million) supports recruitment awards
- 13.5% of the funding (\$327.7 million) supports discovery stage research projects
- 3.7% of funding (\$90.4 million) supports training programs.

CPRIT has 10 open Requests for Applications (RFAs)

- 3 Research Recruitment
- 4 Prevention
- 3 Product Development Research



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: CPRIT ACTIVITIES UPDATE FOR JULY
DATE: AUGUST 2, 2021

Topics in this memo address CPRIT activities in July, including preparations for the upcoming August 18 Oversight Committee meeting, recent milestones in the fight against cancer, a staffing summary, outreach efforts, and news from Compliance, Programs, and Operations. We are planning for the Oversight Committee to meet in person on August 18, however, we are also preparing backup plans if COVID-19 developments make meeting in person untenable.

Planning for the August 18 Oversight Committee Meeting

The Oversight Committee will meet in person on August 18 at the Texas Higher Education Coordinating Board in Austin. If pandemic developments prevent an in-person meeting, we are making alternative Zoom meeting arrangements as a backup.

This meeting is the last meeting of the fiscal year, and we have an ambitious agenda. In addition to grant recommendations for each of the three CPRIT programs, end of the fiscal year updates, proposed contract renewals, and the FY 2022 audit plan, the Oversight Committee will also elect a new chief presiding officer, vice presiding officer, and secretary for two-year terms.

We expect the August 18 meeting to last at least three hours, and it may include a closed session. The meeting will begin at 8:30 a.m. to accommodate the full agenda and members' travel plans. Please let me know as soon as possible if you are unable to attend the August 18 meeting or have schedule constraints that require you to arrive after 8:30 a.m. or leave prior to 12:30 p.m.

You will receive an email from CPRIT by August 6 with a link and password to access the Program Integration Committee's recommendations via the grant award portal. The portal has supporting documentation for each project proposed for an award, including the application, CEO affidavit, summary statement, and grant pedigree. A summary of the award slate will also be available through the portal. There will be more than 70 recommended awards; please allow time to complete the individual conflict of interest checks and review the supporting material.

CPRIT will post the final agenda for the Oversight Committee meeting by August 10; I have attached a tentative agenda. Oversight Committee members should receive an electronic copy of the agenda packet by August 11. Hard copies of the agenda packet will be available at the meeting.

Recent Milestones in the Fight Against Cancer

CPRIT Grantees in the News

- On June 28, Bellicum Pharmaceuticals entered into a license agreement with the University of North Carolina Lineberger Comprehensive Cancer Center and Massachusetts General Hospital covering certain intellectual property and technology rights for the company's CaspaCIDE safety switch and related technologies and the use of rimiducid. The company, based in Houston and San Francisco, received two CPRIT Product Development awards, including a \$5.7 million award in 2011 (RP110508) to support the clinical development of CaspaCIDE, a novel therapy to prevent graft-versus-host-disease, and a \$16.9 million award in 2016 (DP160057) to develop a novel T-cell therapy BPX-501 to treat acute myeloid leukemia.
- Immatics N.V. announced on June 29 that the company signed service agreements with Selexis SA and KBI Biopharma. Under the agreements, Selexis will use its SUREtechnology Platform™ and KBI will leverage its advanced analytics, process, formulation and cGMP manufacturing for Immatics' IMA402 program. Houston-based Immatics US, Inc. received a \$19.7 million CPRIT Product Development Research award in 2015 (DP150029) to develop personalized cellular therapies targeting multiple cancer types.
- Fujifilm Corporation reported on June 29 an \$850 million investment package to accelerate the growth of its core Bio contract development and manufacturing subsidiary, FUJIFILM Diosynth Biotechnologies. The investments will increase capacity for biologics, including recombinant vaccines for COVID-19, and advanced gene therapies in the United Kingdom and the United States.

Kalon Biotherapeutics received a \$7.9 million CPRIT Product Development award in 2012 (CP120038) to support novel process developments for the manufacturing of cancer drugs. Fujifilm Diosynth USA bought Kalon Biotherapeutics in 2014. The College Station manufacturing facility is one of four biologics manufacturing locations run by Fujifilm Diosynth.

- On July 8, the University of Houston reported on Dr. Lorraine Reitzel's work to create sustainable initiatives to help snuff out smoking, particularly among Texans with psychiatric disorders or substance dependencies. While only 14% of Texans are smokers, the rate is much higher—nearly 90%—for Texans with psychiatric disorders or substance dependencies. Dr. Reitzel received a \$1.9 million prevention grant from CPRIT to expand the current Taking Texas Tobacco Free (TTTF) to 18 substance abuse treatment centers and 10 Federally Qualified Health Centers in rural and medically underserved areas across Texas. Since starting in 2013 with the support of a CPRIT grant, TTTF has educated more than 13,000 professionals about tobacco, and its educational materials reach about 645,000 others.
- On July 12, Hummingbird Bioscience, Inc. and The University of Texas MD Anderson Cancer Center launched a multi-year strategic research collaboration to investigate and

evaluate HMBD-002, Hummingbird's VISTA antagonist antibody. The company, based in Houston and Singapore, received a \$13.1 million CPRIT Product Development Research award in 2019 (DP190027) to develop a first-in-class anti-VISTA monoclonal antibody to treat MDSC-mediated suppression of anti-tumor immunity in solid tumors and lymphomas.

- Houston-based Salarius Pharmaceuticals announced on July 13 that it added Fox Chase Cancer Center in Philadelphia as an active trial site for its dose-expansion stage of the ongoing clinical trial evaluating the company's lead drug candidate, seclidemstat, in patients with relapsed or refractory Ewing sarcoma and advanced FET-rearranged sarcomas. With the addition of Fox Chase, nine active sites are taking part in the open label trial intended to assess seclidemstat at the recommended Phase 2 dose. Salarius received a \$16,104,899 Product Development Research award in 2014 (DP160014) to support their Ewing sarcoma clinical trial.
- On July 14, Iterion Therapeutics appointed Jean Chang as Chief Operating Officer. Ms. Chang will lead the Houston-based company's corporate and clinical operations and will oversee the ongoing development of the Iterion's lead product, Tegavivint. Iterion (formerly Beta Cat Pharmaceuticals) received a \$15.9 million CPRIT Product Development Research award in 2014 (CP130058) to develop Tegavivint for desmoid tumors and acute myeloid leukemia.
- Austin-based Curtana Pharmaceuticals signed an agreement July 15 with Catalent to support tablet formulation and manufacturing of Curtana's CT-179, a drug therapy to treat glioblastoma, medulloblastoma, and other brain cancers. Curtana received a \$7.6 million Product Development award in 2014 (DP140034) to develop a novel small molecule targeting glioblastoma and other brain cancers.
- Aravive reported July 15 that it achieved a \$3 million development milestone payment from its licensee, 3D Medicines Inc. This milestone is based on the Center for Drug Evaluation of the China National Medical Products Administration's approval of the Investigational New Drug application filed by 3D Medicines Inc. to take part in Aravive's international AVB-500 Phase 3 platinum resistant ovarian cancer clinical trial. The company, based in Houston and Palo Alto, received a \$20 million Product Development Research award in 2015 (DP150127) to develop AVB-500.

Notable CPRIT-Supported Research Accomplishments

- Chemist Han Xiao, Ph.D., assistant professor of chemistry at Rice University, working with collaborators at Baylor College of Medicine, developed an antibody conjugate that delivers drugs to bone tumors and inhibits metastasis. He used a technique called click chemistry to couple a molecule used to treat osteoporosis with the HER2-targeting antibody trastuzumab used to treat breast cancer. The result, reported in the June 23, 2021, edition of *Science Advances*, is a molecule that seeks out bone tumors and stays put, giving the drug time to kill tumor cells. The next step is to move the compound into a clinical trial and to investigate the potential for similar custom conjugates to treat other tumors prone to bone metastasis,

including prostate cancer. Dr. Xiao is a CPRIT Scholar who Rice recruited to Texas from Stanford University in 2017 through a First-Time Tenure-Track Award (RR170014).

- Our cells follow a molecular clock that controls cell metabolism, much like the body's circadian rhythm controls sleep cycles. Through a CPRIT Individual Investigator Research in Childhood Cancer Award (RP180851), Dr. Eveline Barbieri, assistant professor of pediatrics at Baylor College of Medicine, studies how the molecular clock may be key to treating neuroblastoma, a childhood cancer that accounts for 15% of all childhood cancer deaths. In a study published June 28, 2021, in *Nature Communications* she reports that restoring normal function of the molecular clock suppresses tumor growth in advanced neuroblastoma and can make tumors more sensitive to conventional chemotherapy.
- Finding the line between healthy and cancerous tissue is critical to a successful cancer surgery. Surgeons are using a new diagnostic tool called the MasSpec Pen to accurately show the surgical margins between cancer and normal tissue in patients undergoing surgery for thyroid cancers. Livia Schiavinato Eberlin, Ph.D., an assistant professor of chemistry at The University of Texas in Austin, who invented the pen, and her clinical collaborator, James Suliburk, M.D., at Baylor College of Medicine, are now using the MasSpec Pen to define exact margins between healthy and cancerous tissue in pancreatic cancer surgeries. At about 15 seconds per analysis, the method is more than 100 times as fast as the current gold standard diagnostic, frozen section analysis. The July 13, 2021, edition of the *Proceedings of the National Academy of Sciences* published their results. Dr. Eberlin is a CPRIT funded researcher who is developing rapid molecular diagnostic techniques to differentiate normal and cancer tissues (RP180381, RP170427, and RP160776.)

Personnel

CPRIT has filled 34 of our 36 full-time equivalent (FTE) positions. We are working on job postings for the eight new FTE positions authorized by the legislature.

The posting for the new chief due diligence officer closed July 16. We interviewed a candidate on July 28.

Senior Communications Specialist Chris Cutrone is leaving CPRIT August 6 to enter a full-time master's degree program at Texas A&M University. We expect to post for a replacement soon.

Chief Scientific Officer Search

The Chief Scientific Officer interview committee interviewed five candidates July 6 and 7. Second round interviews take place July 29–August 4. I will update the Oversight Committee as developments warrant.

CPRIT Outreach

Staff outreach activities during July include:

- I met with representatives of the Texas Foundation for Innovative Communities on July 19 to discuss possible future research collaboration opportunities.
- Chief Product Development Officer Dr. Cindy WalkerPeach met in Austin with the principals of JLABS Houston on July 20 to discuss collaboration opportunities.
- Chief Prevention Officer Ramona Magid attended the virtual Southeastern Colorectal Cancer Consortium meeting on July 21.
- Senior Program Manager for Product Development Rosemary French attended the virtual presentation “Small Business Funding Opportunities,” hosted by the TMC Accelerator for Cancer Therapeutics and presented by the National Cancer Institute Small Business Innovation Research (SBIR) Development Center, on July 29.

2021 Legislative Session Recap

The First Called Session of the 87th Texas Legislature began July 8 and lasts through August 6. No item on the governor’s call affects CPRIT.

Compliance Program Update

Submission Status of Required Grant Recipient Reports

CPRIT has \$1.4 billion in active grants under management, with 560+ grants that are either active or wrapping up grant activities. We receive an average of 560 grantee reports each month. As of July 22, five entities had not filed 11 Academic Research reports and three Product Development Research reports. CPRIT’s grant accountants and compliance specialists review and process incoming reports and reach out to grantees to resolve filing issues. In most cases, CPRIT does not disburse grant funds until the grantee files the required reports. In some instances, grantee institutions may be ineligible to receive a future award if the grantee does not file the required reports.

Financial Status Report Reviews

CPRIT’s compliance specialists performed 118 second-level reviews of grantee Financial Status Reports (FSRs) in July. Six FSRs (5%) needed resubmission due to insufficient or inaccurate documentation sent by the grantee. CPRIT’s grant accounting staff completes the first review of the FSRs and supporting documentation before routing them to the compliance specialists for final review and disposition.

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Currently, all grantees have supplied required audits. Grantees are unable to receive reimbursements or advances if they are delinquent in filing the required audit and corrective action plan unless the grantee requests more time by the due date of the required audit and I approve the request.

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Product development grantees plus those academic research grantees whose indirect cost rate credit does not fully offset the required match must supply a detailed match expenditure report that includes the amount and date paid, vendor, description, and budget category. Compliance staff review the grantees' match expenditures for appropriateness and allowability and work with CPRIT's grant accountants and the grantee to address any deficiencies. Compliance staff

performed annual match expenditure reviews for two grantees in July. The total amount of match expenses reviewed by compliance staff for FY 2021 is \$14,029,515.

Training and Support

CPRIT staff conducted four new Authorized Signing Official (ASO) training webinars in July for Invectys, USA, Texas Southern University, Texas Tech Health Sciences Center at El Paso, and Molecular Templates. The trainings covered grant reporting requirements, administrative rule changes, grant closeout, and an overview of the compliance program including fraud, waste, and abuse reporting. Per Texas Administrative Code §703.22, CPRIT requires new ASOs to complete a compliance training program within 60 days of the change.

Academic Research Program Update

FY 2021 Recruitment Applications

CPRIT’s Scientific Review Council (SRC) met May 13, June 10, and July 8 to review recruitment applications filed for cycles 21.10–21.12. Dr. Willson will present the SRC’s recommendations to the Program Integration Committee (PIC) and the Oversight Committee in August.

FY 21.10–21.12 Mechanism	Received	Funds Requested	Proposed by SRC	Funds Proposed by SRC
Recruitment of Established Investigators	3	\$18,000,000	1*	N/A
Recruitment of Rising Stars	3	\$11,998,389	2	\$7,998,389
Recruitment of First-Time, Tenure Track Faculty Members	21	\$41,290,005	10	\$19,999,309
TOTAL	27	\$71,288,394	12	\$27,997,698

* The applicant withdrew its Recruitment of Established Investigator award application after the SRC recommended it for an award but before the PIC considered the recommendation.

FY 2021 Review Cycle 2 (21.2)

CPRIT released six academic research RFAs in August 2020 and began accepting applications for the 21.2 review cycle on September 16, 2020. In addition to Core Facility Support Awards, High Impact/High Risk Awards, and Early Clinical Investigator Awards, the 21.2 review cycle includes several new RFAs, including the new Clinical Trials Network Award, Texas Clinical Trials Participation Program Award, and Texas Regional Excellence in Cancer Award. Applicants filed 159 proposals by the January 27 deadline. Peer review panels met in late May to review the applications. Dr. Willson will present the SRC’s recommended research awards to the PIC and the Oversight Committee for consideration in August.

FY 2021 Cycle 2 RFA Mechanism	Received	Funds Requested
Core Facility Support Awards	25	\$95,848,572
Clinical Trials Network Awards	5	\$13,481,740
Early Clinical Investigator Awards	11	\$16,426,401
High-Impact/High Risk Awards	107	\$26,501,441
Texas Clinical Trials Participation Program Awards	4	\$5,982,538
Texas Regional Excellence in Cancer Awards	7	\$41,786,641
Total	159	\$200,027,333

FY 2022 Cycle 1 RFAs

CPRIT released the first five RFAs for FY 2022 grant awards on January 13. CPRIT received 403 applications for the first cycle of FY 2022 (22.1) research awards by the June 2 deadline. Peer review panels will meet virtually in October to evaluate the applications and make grant award recommendations. The Chief Scientific Officer will present the SRC's recommendations to PIC and the Oversight Committee in February 2022.

FY 2022 Cycle 1 RFA Mechanism	Received	Funds Requested
Individual Investigator Research Awards	282	\$285,494,299
Individual Investigator Research Awards for Cancer in Children and Adolescents	50	\$67,884,165
Individual Investigator Research Awards for Clinical Translation	27	\$52,079,326
Individual Investigator Research Awards for Computational Systems Biology of Cancer	21	\$23,825,931
Individual Investigator Research Awards for Prevention and Early Detection	23	\$44,112,406
Total	403	\$473,396,127

The 22.1 Cycle RFA Mechanisms

- Individual Investigator Research Awards (IIRA)*
 Supports applications for innovative research projects addressing critically important questions that will significantly advance knowledge of the causes, prevention, and/or treatment of cancer. Areas of interest include laboratory research, translational studies, and/or clinical investigations. Competitive renewal applications accepted.
 Award: Up to \$350,000 per year. Exceptions allowed if extremely well justified; maximum duration: 3 years.
- Individual Investigator Research Awards for Computational Systems Biology of Cancer (IIRACSB)*
 Supports applications for innovative mathematical and/or computational research projects addressing questions that will advance current knowledge in the (a) mechanisms that tie altered gene expression and downstream molecular mechanisms to functional cancer phenotypes and/or (b) mechanisms that tie tumor morphology to functional cancer

phenotypes and/or mechanisms that tie treatment sequence and combination to evolving functional cancer phenotypes (that emerge as a result of treatment selection).

Award: Up to \$400,000 in total costs per year. Exceptions allowed if extremely well justified; maximum duration: 3 years.

- *Individual Investigator Research Awards for Cancer in Children and Adolescents (IIRACCA)*
Supports applications for innovative research projects addressing questions that will advance knowledge of the causes, prevention, progression, detection, or treatment of cancer in children and adolescents. Laboratory, clinical, or population-based studies are all acceptable. CPRIT expects the outcome of the research to reduce the incidence, morbidity, or mortality from cancer in children and/or adolescents in the near or long term. Competitive renewal applications accepted.
Award: Up to \$350,000 per year. Applicants that plan to conduct a clinical trial as part of the project may request up to \$500,000 in total costs. Exceptions allowed if extremely well justified; maximum duration: 4 years.
- *Individual Investigator Research Awards for Prevention and Early Detection (IIRAP)*
Supports applications which propose clinical and population-based projects designed to develop effective prevention and early detection interventions to reduce cancer risk, mortality, and morbidity among Texans. Projects that propose such research collaborations with existing CPRIT Prevention Program awardees, including the CPRIT funded *Texas Collaborative Center for Hepatocellular Cancer* (<https://www.bcm.edu/research/labs-and-centers/research-centers/texas-collaborative-center-for-hepatocellular-cancer>), are strongly encouraged.
Award: Up to \$500,000 per year. Exceptions allowed if extremely well justified; maximum duration: 4 years.
- *Individual Investigator Research Awards for Clinical Translation (IIRACT)*
Supports applications that propose innovative cancer clinical studies that are hypothesis driven and involve patients enrolled prospectively on a clinical trial. Areas of interest include clinical studies of new or repurposed drugs, hormonal therapies, immune therapies, surgery, radiation therapy, stem cell transplantation, combinations of interventions, or therapeutic devices.
Award: Up to \$500,000 per year. Exceptions allowed if extremely well justified; maximum duration: 4 years.

Product Development Research Program Update

FY 2021 Product Development Research RFAs

CPRIT released three Product Development RFAs in November 2020 seeking applications for the Texas Company, Relocation Company, and Seed Company awards and received 35 eligible applications by the January 27, 2021, deadline. After the Product Development peer review

panels met by videoconference on March 22–23 for initial peer review, eight companies moved forward to live presentations via videoconference, held April 19–21.

Following the company presentations, the peer review panels recommended five applications for due diligence review. The Product Development Review Council (PDRC) met in July to review the due diligence reports and make final recommendations. Dr. WalkerPeach will present the PDRC’s two award recommendations totaling \$27,565,207 to the PIC and the Oversight Committee in August.

FY 2022 Cycle 1 (22.1) Product Development Research RFAs

CPRIT released three product development RFAs on May 27 for the first cycle of FY 2022. On June 23, Dr. WalkerPeach and Ms. French hosted a webinar giving an overview of the Cycle 22.1 Product Development RFAs and tips for putting together a good application. The application portal opened on June 24 to receive applications and will close on August 4. Dr. WalkerPeach will present the Cycle 22.1 award recommendations to the PIC and the Oversight Committee in February.

- *Texas Company Product Development Research Award (TXCO)*
Supports early-stage “startup” and established companies in the development of innovative products, services, and infrastructure with significant potential impact on cancer patient care. The proposed project must further the development of new products for the diagnosis, treatment, or prevention of cancer; must set up infrastructure that is critical to the development of a robust cancer biotech industry; or must fill a treatment or research gap. Companies must headquarter in Texas.
Award: Up to \$20 million over three years.
- *Company Relocation Product Development Award (RELCO)*
The goal of this award mechanism is to recruit Texas companies with proven management teams focused on exceptional product opportunities to improve cancer care. The award supports early stage “startup” and established companies in the development of innovative products and services with significant potential impact on cancer patient care. The proposed project must further the development of new products or services for the diagnosis, treatment, or prevention of cancer; must foster a robust biotechnology industry ecosystem; or must fulfill a critical unmet need in cancer patient care.
Award: Up to \$20 million over three years.
- *Seed Award for Product Development Research (SEED)*
Supports early-stage “startup” companies in the development of innovative products, services, and infrastructure with significant potential impact on cancer patient care. The proposed project must further the development of new products for the diagnosis, treatment, or prevention of cancer; must set up infrastructure that is critical to the development of a robust cancer biotech industry; or must fill a treatment or research gap.
Award: Up to \$3 million over three years.

Prevention Program Update

FY 2021 Cycle 2 (21.2) Prevention RFAs

CPRIT released four Cycle 21.2 RFAs in October of 2020. By the February 10 deadline, CPRIT received 22 applications requesting \$24.5 million. Peer reviewers met April 26–29 to evaluate the applications. The Prevention Review Council (PRC) met May 27 and June 17 to consider the applications, including four Dissemination applications. Ms. Magid will present the PRC’s Cycle 21.2 recommendations for 11 awards totaling \$11.4 million to the PIC and the Oversight Committee in August.

21.2 Grant Mechanism	Received	Funds Requested	Recommended by PRC	Recommended Funding
Dissemination of CPRIT-Funded Cancer Control Interventions	4	\$1,198,638	3	\$899,960
Evidence-based Cancer Prevention Services	10	\$9,724,716	1	\$1,000,000
Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations	3	\$6,580,487	2	\$4,497,017
Tobacco Control and Lung Cancer Screening	5	\$6,973,002	3	\$4,999,604
TOTAL	22	\$24,476,843	9	\$11,396,581

FY 2022 Cycle 1 (22.1) Prevention RFAs

CPRIT released four RFAs on May 7 for the first cycle of FY 2022. Applications are due September 1, with peer review taking place in December. Ms. Magid will present the PIC’s recommendations for Cycle 22.1 awards to the Oversight Committee in February of 2022.

- Evidence-Based Cancer Prevention Services*
 Seeks projects that will deliver evidence-based cancer prevention and control clinical services. CPRIT will give priority to projects that propose to address CPRIT areas of emphasis and serve areas of the state not covered by current CPRIT funded projects.
 Award: Up to \$1 million over 3 years.
- Tobacco Control and Lung Cancer Screening*
 Seeks programs on tobacco prevention and cessation, as well as screening for early detection of lung cancer. Through release of this RFA, CPRIT’s goal is to stimulate more programs across the state, thereby supplying greater access for underserved populations and reducing the incidence and mortality rates of tobacco-related cancers. This RFA promotes the delivery of evidence-based programming designed to significantly increase tobacco cessation among adults and/or prevent tobacco use by youth.
 New Award: Up to \$1 million over 3 years.

- Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations*
 Seeks to support coordination and expansion of evidence-based services to prevent cancer in underserved populations who do not have adequate access to cancer prevention interventions and health care, bringing together networks of public health and community partners to carry out programs tailored for their communities. Projects should name cancers that cause the most burden in the community and use evidence-based models shown to work in similar communities to prevent and control these cancers. Currently funded CPRIT projects should propose to expand their programs to include more types of prevention clinical services and/or an expansion of current clinical services into more counties. In either case, the expansion must include delivery of services to nonmetropolitan and medically underserved counties in the state.
 Initial Expansion Award: Up to \$2 million over 3 years.
 Subsequent Expansion Award: Up to \$2.5 million over 5 years.
- Prevention Program Assessment*
 Seeks applications for one project to assess the progress of the CPRIT Prevention Program since 2010 and to develop an assessment plan for the next stage of the CPRIT Prevention Program. The evaluation will use a mixed-methods approach that combines quantitative and qualitative data to supply evidence of effectiveness and information about how organizations and populations implement and sustain CPRIT-related changes. CPRIT will use evaluation findings to improve program effectiveness and to inform decisions about future program development.
 Award: Up to \$750,000 over 2 years.

Advisory Committee Meetings

The Advisory Committee on Childhood Cancer met July 26.

Operations, Audit and Finance Update

CPRIT's internal auditor, Weaver, continued field work on the IT general computer controls audit, governance audit follow-up, business continuity planning advisory follow-up, and the records management (grantee compliance records) audit advisory. On July 28, Weaver and CPRIT staff met to update the agency risk assessment to complete the draft FY 2022 Internal Audit Plan for Oversight Committee approval.

Chief Operating Officer Heidi McConnell and I attended the Bond Review Board planning meeting on July 13 and board meeting on July 22. The Board considered CPRIT's FY 2022 financing request to issue up to \$298.1 million in general obligation commercial paper notes and approved the financing request on July 22.

On July 13, the Legislative Budget Board notified CPRIT that it approved our March 26 request to transfer \$448,525 in appropriated funds among budget strategies to pay CPRIT's FY 2021

Statewide Cost Allocation Plan (SWCAP) amount. The Comptroller’s Office notified CPRIT in early January of a 551% increase in CPRIT’s SWCAP amount, which necessitated our transfer request.

Communications Update

Media Highlights and Highlights

- The July 5 story in the *Dallas Morning News* on Senator Jane Nelson’s announced retirement referred to CPRIT as her “most far-reaching legislative accomplishment.”
<https://www.dallasnews.com/news/politics/2021/07/05/veteran-denton-county-gop-lawmaker-jane-nelson-will-not-seek-11th-term-in-texas-senate/>

Social Media Statistics

- Twitter (June 24–July 21)

Total Tweets: 7

Tweet Impressions: 12,400

Profile Visits: 1,669

Mentions: 43

New Followers: 28 (2,932 total)

Top tweet: On Thursday, July 29, the CPRIT-backed [@TXMedCenter](#) ACT program in collaboration with [@GCCAMR](#) and [@utmbhealth](#) will host a virtual event with [@NCIsbir](#) on assistance to early-stage innovative cancer technology projects. Register here:

<https://cprit.us/3ytyxeO>

Impressions: 2,073

Engagements: 29

Top mention: @SuperSciJew - Excited to confirm that I am starting [@RibackLab](#) joining the department of MCB [@BCMHouston](#) with support from [@CPRITTexas](#)! We'll be hiring, so if you're interested in bridging the biology and physics of Biological Condensates, please get

intouch! <http://RibackLab.com>

Engagements: 1,473

- LinkedIn (June 20–July 20)

Total Updates: 7

Post Impressions: 30,600

Reactions: 484

Shares: 16

Page views: 290

Unique Visitors: 1331

New followers: 97 (1,310 total)

Top Update: On Thursday, July 29, the CPRIT-backed ACT program at [Texas Medical Center Innovation](#) will host a virtual event with the [NCI SBIR Development Center](#) on assistance to early-stage innovative cancer technology projects. Register here: [#innovation](https://cprit.us/3ytyxeO)

Impressions: 364

Clicks: 11

Reactions: 4

Engagement rate: 4.67%

- Facebook (June 23–July 20)

Reach: 415 people

Engagement: 141 reactions/clicks

Page Views: 46

Top Post: CPRIT congratulates our [#Scholar](#) Dr. Liela Romero of the [Baylor University](#) Chemistry & Biochemistry Department for receiving a grant from [The Welch Foundation](#). Dr. Romero was recruited to Baylor University with a First-Time, Tenure-Track Faculty grant in May 2020. Visit her Scholar page to learn more about her research: <https://cprit.us/3xOojpO>

Post Reach: 181 people

Engagement: 11 clicks, 4 reactions

Upcoming Subcommittee Meetings

Listed below are the subcommittee meetings in advance of the August 18 Oversight Committee meeting. Unless pandemic developments dictate otherwise, the August 18 meeting will be an in-person meeting at the Texas Higher Education Coordinating Board in Austin.

Board Governance	August 5 at 10:00 a.m.
Contract Issues	August 5 at 2:30 p.m.
Audit	August 9 at 10:00 a.m.
Prevention	August 10 at 10:00 a.m.
Academic Research	August 11 at 10:00 a.m.
Product Development	August 12 at 10:00 a.m.
Nominations	August 13 at 10:30 a.m.

We will send instructions for signing onto the Zoom platform along with the subcommittee agenda and meeting materials one week prior to the meeting date. Please plan to join the subcommittee meeting a few minutes early so we can address any technology issues before the meeting start time.

CPRIT has awarded **1,608** grants totaling **\$2.721 billion**

- 249 prevention awards totaling \$288.9 million
- 1,359 academic research and product development research awards totaling \$2.432 billion

Of the \$2.432 billion in academic research and product development research awards,

- 29.5% of the funding (\$718.2 million) supports clinical research projects
- 23.9% of the funding (\$582.3 million) supports translational research projects
- 29.4% of funding (\$713.6 million) supports recruitment awards
- 13.5% of the funding (\$327.7 million) supports discovery stage research projects
- 3.7% of funding (\$90.4 million) supports training programs.

CPRIT has 10 open Requests for Applications (RFAs)

- 3 Research Recruitment
- 4 Prevention
- 3 Product Development Research



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: VINCE BURGESS, CHIEF COMPLIANCE OFFICER
SUBJECT: COMPLIANCE PROGRAM UPDATE
DATE: AUGUST 9, 2021

The Chief Compliance Officer is responsible for apprising the Oversight Committee and the Chief Executive Officer of institutional compliance functions and activities, and assuring the Oversight Committee that controls are in place to prevent, detect and mitigate compliance risk. The required reporting includes quarterly updates to the Oversight Committee on CPRIT's compliance with applicable laws, rules, and agency policies. In addition, the Compliance Officer is responsible for monitoring the timely submission status of required grant recipient reports and notifying the Oversight Committee and General Counsel of a grant recipient's failure to meaningfully comply with reporting deadlines.

Submission Status of Required Grant Recipient Reports

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Product development grantees plus those academic research grantees whose indirect cost rate credit does not fully offset the required match must supply a detailed match expenditure report that includes the amount and date paid, vendor, description, and budget category. Compliance staff reviews grantees' match expenditures for appropriateness and allowability and work with CPRIT's grant accountants and the grantee to address any deficiencies. Compliance staff performed annual match expenditure reviews for two grantees in May, June, and July. The total amount of match expenses reviewed by compliance staff for FY 2021 is \$14,029,515.48.

Training and Support

CPRIT staff conducted four new Authorized Signing Official (ASO) training webinars in May, June, and July for Invectys USA, Texas Southern University, Texas Tech Health Sciences Center at El Paso, and Molecular Templates. The training covered grant reporting requirements, administrative rule changes, grant closeout, and an overview of the compliance program including fraud, waste, and abuse reporting. Pursuant to Texas Administrative Code §703.22, CPRIT requires new ASOs to complete a compliance training within 60 days of the change.

CPRIT staff conducted two new grantee training webinars for Barricade Therapeutics, Corp., and Texas A&M University - Corpus Christi. The trainings covered grant reporting requirements, administrative rule changes, grant closeout, and an overview of the compliance program including fraud, waste, and abuse reporting. Pursuant to Texas Administrative Code §703.22, CPRIT requires new grantees to complete the initial compliance training program prior to receiving disbursement of grant award funds.

CPRIT staff conducted a series of Annual Compliance Training webinars on June 9-10 for 180 grantee staff. Trainings are specific to each program area (Academic Research, Product Development Research, and Prevention) and allow for an interactive experience and opportunity to focus on topics relevant to each program. The trainings cover grant reporting requirements, administrative rule changes, grant closeout, and an overview of the compliance program including fraud, waste, and abuse reporting. This was the second training series offered this year for the annual compliance training requirement, which requires the Authorized Signing Official (ASO) and at least one other employee from each grantee organization to attend an annual compliance training by December 31 of each year.

Grantee Risk Assessment and FY22 Monitoring Plan

CPRIT's Compliance staff is finalizing the FY22 Grantee Risk Assessment and Monitoring Plan. Risk Assessments are performed on a quarterly and annual basis. The Risk Assessment Model considers several factors in determining grantee risk including:

- Financial exposure,
- Entity maturity, and
- Prior experience administering grants.

Risk Assessments assign a priority ranking (1, 2, or 3) to grant recipients, which is used to determine monitoring and training needs for the coming fiscal year. Based on the results of the Risk Assessment, grantees will receive a desk review, or an onsite monitoring review completed by CPRIT staff. Compliance monitoring reviews are designed to evaluate a grantee's compliance with grant requirements included in the Texas Administrative Code, Texas Health and Safety Code, CPRIT Policies and Procedures, Uniform Grant Management Standards, and terms of the grant contract.

FY22 Risk Assessment Factors and Weighting

Risk Factor	Factor Weighting	Risk Criteria		Criteria Weighting
Financial Exposure	40%	Funds Awarded	Cumulative \$	10%
			Average Grant \$	10%
			Highest Single Grant \$	
			Revenue Sharing	15%
			Percent Grants Prod Dev	65%
			Percent Grants Prevention	
			Composite	

Entity Maturity	35%	Entity Maturity	Immature/ Mature/ Very Mature	10%
		Organization Type	Academic/ Government/ Private/ Not-for-Profit	65%
		Year Institution Established	Year	10%
		Advance Grant Funds	Advance Grant Funds	15%
			Composite	

Prior Experience	25%	Financial Status Reporting - Timeliness	Days Late: 0-30/ 31-60/ >60	35%
		Other Financial Reporting - Timeliness	Days Late: 0-30/ 31-60/ >60	
		Progress Reporting - Timeliness	Days Late: 0-30/ 31-60/ >60	
		Grant Status	<15%/ 15%-60%/ >60%	10%
		Prior Audit Findings (Single Audit, etc.)	No Findings/ 1-2 Findings/ >2 Findings	35%
		Average Monitoring Findings	No Findings/ 1-2 Findings/ >2 Findings	
		Audit Type	A-133, Program Specific, AUP	10%
		Date Last On-site Review Performed	Last Year/ Last 3 Years/ More than 3 Years	10%
			Composite	

Quantified Risk Assessment		Quantified Risk Composite	
		Grant Monitoring Tier	Priority 1, 2, 3



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: JAMES WILLSON, M.D., CHIEF SCIENTIFIC OFFICER
SUBJECT: ACADEMIC RESEARCH PROGRAM FY2022.2 PROPOSED SCHOLAR RFAS AND OPEN RFAS.
DATE: AUGUST 18, 2021

FY2022 Cycle 1 (22.1) RFA Submission data and review status

Table 1 displays the number of applications submitted by mechanism for the FY2022.1 RFAs. CPRITs Application Receipt System (CARS) opened for FY22.1 applications on March 3, 2021 and closed on June 2, 2021. Virtual Peer Review is being scheduled for October 2021. CPRITs Chief Scientific Officer will present the Scientific Review Council’s recommendations to PIC and the Oversight Committee in February 2022.

Table 1: FY2022 Cycle 1 (22.1) Submission Data and requested funding

RFA Mechanism	# Applications Submitted	Requested Funding
Individual Investigator Research Awards (IIRA)	282	\$285,494,299
Individual Investigator Research Awards for Cancer in Children and Adolescents (IIRACCA)	50	\$67,884,165
Individual Investigator Research Awards for Clinical Translation (IIRACT)	27	\$52,079,326
Individual Investigator Research Awards for Computational Systems Biology of Cancer (IIRACSBC)	21	\$23,825,931
Individual Investigator Research Awards for Prevention and Early Detection (IIRAP)	23	\$44,112,406
Total	403	\$473,396,127

Proposed Academic Research Scholar RFAs for Fiscal Year 2022 Cycle 2 (22.2)

The Academic Research Program proposes the following RFAs for FY22.2
CYCLE 22.2 RFAs: Proposed: RFA receipt due 1/22; Awards Announced 8/22

- **Core Facility Support Awards (RFA R-22.2 CFSA)**

Solicits applications from institutions to establish or enhance core facilities (laboratory, clinical, population-based, or computer-based) that will directly support cancer research programs to advance knowledge of the causes, prevention, and/or treatment of cancer or improve quality of life for patients with and survivors of cancer.

Award: Up to \$4,000,000 (total costs); Maximum duration: 5 years.

- **High Impact/High Risk Research Awards (RFA R-22.2 HIHR)**

Provides short-term funding to explore the feasibility of high-risk projects that, if successful, would contribute major new insights into the etiology, diagnosis, treatment, or prevention of cancers.

Award: Up to \$250,000 (total costs); Maximum duration: 2 years.

- **Early Clinical Investigator Award (RFA R-22.2 ECI)**

Solicits applications from institutions to provide cancer physicians early in their academic career the opportunity to develop clinical research skills and to gain experience in advanced methods and experimental approaches needed to become clinical investigators; to provide an opportunity to establish a partnership with a laboratory-based collaborator in order to design and conduct correlative studies needed to interpret the outcome of an interventional trial; to provide the protected time from clinical responsibilities required to develop and conduct investigator initiated clinical trials; and to increase the pool of clinical investigators at Texas academic institutions who are conducting patient-oriented studies, capitalizing on basic discoveries and translating them through conduct of innovative clinical trials involving cancer patients or individuals at risk for cancer.

Award: Up to \$1,500,000 (total costs) Maximum duration: 5 years

Proposed Academic Research Scholar RFAs for Fiscal Year TBD

- **Texas Regional Excellence in Cancer Award (RFA R-TBD TREC)**

The Texas Regional Excellence in Cancer (TREC) award is a multicomponent award designed to strengthen cancer research at institutions located in regions of Texas that have historically received low levels of peer-reviewed cancer research funding. Applicants may request up to \$6.0 million in CPRIT funds over 5 years to support program leadership, investigator-initiated research projects, recruitment of new junior faculty, and research infrastructure. Academic research institutions located greater than 100 miles from an NCI designated Cancer Center were eligible to apply. Institutions with an active TREC award are not eligible.

Award: Up to \$6,000,000 (total costs) Maximum duration: 5 years

- **Clinical Trials Network Award (RFA R-TBD CTNA)**

The Clinical Trials Network Award (CTNA) will be made to Lead Institutions (LI) to develop and oversee a network of two cancer care facilities (Network Affiliates) (Stage 1) to extend access to a select group of LI cancer clinical trials. Once an initial network is satisfactorily demonstrated, the LI will be eligible to receive additional CPRIT funding to expand its network to two additional facilities that must be located outside the LI current catchment (Stage 2).

Award: Up to \$600,000 annually for stage 1 and up to \$900,000, annually for stage 2.

Maximum duration: 4 years



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: RAMONA MAGID, CHIEF PREVENTION OFFICER
SUBJECT: PREVENTION PROGRAM UPDATE
DATE: AUGUST 18, 2021

FY 2021 Cycle 2 (21.2) Prevention Applications

CPRIT released four (4) RFAs on October 15, 2020 for the second cycle of FY 2021. Eighteen (18) applications requesting \$23,278,205 underwent peer review via teleconference on April 26. The Prevention Review Council (PRC) met on June 17 to review the four (4) Dissemination applications requesting \$1,198,638 and the results of the peer review panel. The Program Integration Committee (PIC) met August 3 to consider the PRC’s recommendations. Ms. Magid presents the PIC’s award recommendations to the Oversight Committee (OC) on August 18.

FY 2021.2 (21.2) Application Data by Mechanism

Mechanism	Received	Funds Requested
Dissemination of CPRIT-Funded Cancer Control Interventions	4	\$ 1,198,638
Evidence-based Cancer Prevention Services	10	\$ 9,724,716
Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations	3	\$ 6,580,487
Tobacco Control and Lung Cancer Screening	5	\$ 6,973,002
TOTAL	22	\$24,476,843

FY 2022 Cycle 2 (22.1) Prevention RFAs

CPRIT released four (4) RFAs on May 7 for the first cycle of FY2022. Applications are due on September 1, 2021 and peer review is scheduled for December 2021. Ms. Magid will present the PIC’s recommendations to the OC in February 2022.

Dissemination of CPRIT-Funded Cancer Control Interventions

This award mechanism seeks to fund projects that will facilitate the dissemination and implementation of successful CPRIT-funded, evidence-based cancer prevention and control interventions across Texas. The proposed project should be able to develop one or more "products" based on the results of the CPRIT-funded intervention. The proposed project should also identify and assist others to prepare to implement the intervention and/or prepare for grant funding.

Award: Maximum of \$300,000; Maximum duration of 24 months.

Evidence-Based Cancer Prevention Services

Evidence-Based Cancer Prevention Services - This award mechanism seeks to fund projects that will deliver evidence-based cancer prevention and control clinical services. Priority will be given to projects that propose to address CPRIT areas of emphasis and serve areas of the state not well addressed by current CPRIT funded projects.

Award: Maximum of \$1M; Maximum duration of 36 months.

Expansion of Cancer Prevention Services to Rural and Medically Underserved Populations

This award mechanism seeks to support the coordination and expansion of evidence-based services to prevent cancer in underserved populations who do not have adequate access to cancer prevention interventions and health care, bringing together networks of public health and community partners to carry out programs tailored for their communities. Projects should identify cancers that cause the most burden in the community and use evidence-based models shown to work in similar communities to prevent and control these cancers. Currently funded CPRIT projects should propose to expand their programs to include additional types of prevention clinical services and/or an expansion of current clinical services into additional counties. For projects requesting a maintenance expansion, expansion of clinical services or geographic area is optional; however, the number of clinical services delivered should be substantially increased.

Initial Expansion Award: Maximum of \$2M; Maximum duration of 36 months.

Maintenance Expansion Award: Maximum of \$2.5M; Maximum duration of 60 months.

Tobacco Control and Lung Cancer Screening

This award mechanism seeks to fund programs on tobacco prevention and cessation, as well as screening for early detection of lung cancer. Through release of this RFA, CPRIT's goal is to stimulate more programs across the state, thereby providing greater access for underserved populations and reducing the incidence and mortality rates of tobacco-related cancers. This RFA

seeks to promote and deliver evidence-based programming designed to significantly increase tobacco cessation among adults and/or prevent tobacco use by youth.

Award: Maximum of \$1M for new projects and \$2M for expansion projects; Maximum duration of 36 months.

Prevention Program Assessment

This award mechanism solicits applications for one project to assess the initial progress of the CPRIT Prevention Program since 2010 and to develop an assessment plan for the next stage of the CPRIT Prevention Program. The evaluation will use a mixed-methods approach, which combines quantitative and qualitative data to provide evidence of effectiveness and information about how CPRIT-related changes are embedded and sustained in organizations and populations. Evaluation findings will be used to improve program effectiveness and to inform decisions about future program development.

Award: Maximum of \$750,000; Maximum duration of 24 months.

Other Activities

Ms. Magid attended the virtual Southeastern Colorectal Cancer Consortium on July 21, 2021. She also attended the quarterly meeting of the Cancer Alliance of Texas.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: CINDY WALKERPEACH, PHD
CHIEF PRODUCT DEVELOPMENT OFFICER
SUBJECT: PRODUCT DEVELOPMENT RESEARCH UPDATE
DATE: 06 AUGUST 2021

Product Development Research Review Cycle Updates

Product Development Research FY 2021 Cycle 1

CPRIT released the TXCO, RELCO and SEED Product Development Research RFAs on November 9, 2020, and accepted applications through January 27, 2021. Applicants submitted thirty-six (36) responses to the RFAs. Upon administrative review, one (1) application was withdrawn, resulting in a total of thirty-five (35) applications moving forward for review. The peer review screen held on March 22-23, 2021, resulted in a total of eight (8) applications invited to in-person presentations (via Zoom) from April 19-22, 2021. As a result of the Peer Review Meeting, the peer review panels recommended five (5) applications for diligence evaluation.

The PDRC convened on July 8th to consider the due diligence reports and make final award recommendations for consideration by the PIC and the Oversight Committee. The PDRC recommended two (2) TXCO awards for the 21.1 cycle.

Dr. WalkerPeach will present the PIC's recommendations for the 21.1 cycle awards at the August 2021 Oversight Committee meeting.

Application metrics for the Cycle 21.1 are reflected in Table 1.

Table 1: Overall FY 2021 Cycle 1 Application Data by Mechanism

Table 1 reflects the overall application data for Cycle 21.1 including the two (2) award recommendations to be presented at the August 2021 OC Meeting.

Mechanism	App's Received	Funds Requested (millions)	Invited to Peer Review Meeting	Funds Requested (millions)	Rec'd for Diligence Review	Funds Requested (millions)	Rec'd for Award	Funds Requested (millions)
Texas Company	8	\$99.9	3	\$41.8	3	\$41.8	2	\$27.6
Relocation Company	6	\$98.0	2	\$35.6	1	\$20.0	0	\$0
Seed Company	21	\$55.1	3	\$9.0	1	\$3.0	0	\$0
TOTAL	35	\$252.9	8	\$86.4	5	\$64.8	2	\$27.6

Product Development Research FY 2022 Cycle 1

CPRIT released TXCO, RELCO and SEED RFAs on June 24, 2021, and accepted award applications through August 4, 2021. Twelve (12) applications were submitted and are currently undergoing administrative review. Initial peer review will take place September 28-29 and selected applicants will be invited to in-person presentations during October 25-28, 2021. Following peer review due diligence, Dr. Cindy WalkerPeach, Chief Product Development Officer, would present the PDRC's recommendations to the Program Integration Committee and Oversight Committee for approval at the February 2022 Oversight Committee meeting.

Table 2: Review Cycle 22.1 Application Data by Mechanism*

Mechanism	Applications Received	Funds Requested (millions)
Texas Company	4	\$38,258,557
Relocation Company	2	\$36,671,424
Seed Company	6	\$17,712,522
TOTAL	12	\$92,642,503

*currently undergoing administrative review

Product Development Research FY 2022 Cycle 2

Dr. WalkerPeach presented, and the Oversight Committee approved, the following three (3) RFAs during the February 2021 OC meeting for FY2022 Cycles 1 and 2:

- *Texas Company Product Development Research Award (TXCO):*
RFA supporting TX based company product development research projects
Award: Up to \$20 million over a maximum timeline of three years.
- *Company Relocation Product Development Award (RELCO):*
RFA supporting product development research projects for companies relocating to TX
Award: Up to \$20 million over a maximum timeline of three years.
- *Seed Award for Product Development Research (SEED):*
RFA supporting product development research projects from newly formed companies
Award: Up to \$3 million over a maximum timeline of three years.

For the 22.2 Cycle, Product Development Research anticipates opening the application portal in November/December 2021 with a January 2022 deadline. The 22.2 award recommendations are anticipated to be presented during the August 2022 OC Meeting.

Product Development Research Policy Update

Multiple Awards/Matching Funds Policy Recommendation

We recommend that the Oversight Committee approve a change to CPRIT's policy regarding the required amount of matching funds for Product Development grantees who have received more than one CPRIT product development award. CPRIT proposes to update the policy, established in FY 2017, to link the amount of required matching funds to the total amount of CPRIT product development grant funds committed to the company rather than the number of approved product development grants. Please see attached memo.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS

FROM: CINDY WALKERPEACH, PH.D., CHIEF PRODUCT DEVELOPMENT OFFICER
KRISTEN PAULING DOYLE, DEPUTY EXECUTIVE OFFICER AND GENERAL COUNSEL

SUBJECT: REVISING MATCHING FUND POLICY FOR REPEAT PRODUCT DEVELOPMENT GRANTEES

DATE: AUGUST 5, 2021

Summary and Recommendation

We recommend that the Oversight Committee approve a change to CPRIT's policy regarding the required amount of matching funds for Product Development grantees who have received more than one CPRIT product development award. CPRIT proposes to update the policy, established in FY 2017, to link the amount of required matching funds to the total amount of CPRIT product development grant funds committed to the company rather than the number of approved product development grants.

Background

CPRIT's grant contract for research awards includes a statutorily required matching funds provision. The grantee must dedicate at least \$1 of their own funds toward the grant project for every \$2 contributed by CPRIT. An academic research grantee fulfills the matching requirement using a credit related to the institution's federally authorized indirect cost rate. In contrast, a product development grantee must invest its own capital in the CPRIT-funded project to meet the matching obligation.

In 2017 the Oversight Committee voted to allow product development grantees to receive more than one CPRIT grant. (CPRIT has never limited academic research or prevention grantee institutions or their principal investigators from applying for and receiving more than one grant award.) To date, four (4) grantees have received two CPRIT product development awards and the Oversight Committee approved a third product development award for one grantee.

When the Oversight Committee endorsed the policy that product development grantees are eligible for repeat awards, the board also voted to change CPRIT's matching fund policy. The new policy increased the standard matching funds amount (\$1 contributed by the grantee for every \$2 funded by CPRIT) for companies receiving more than one product development award

to a dollar-for-dollar match. The new policy also includes a process for the Oversight Committee to waive the higher matching funds requirement upon reasonable justification.

CPRIT justified raising the matching amount for repeat product development grantees on the grounds that these grantees were more likely to have ongoing operations and stronger track records. Both factors contribute to the grantee's ability to raise additional funds. Because the repeat grantee's proportionate share of project costs increases, more CPRIT funds are available for other earlier stage Product Development grants.

CPRIT introduced a new product development grant mechanism, the seed company award, for the FY 2019 review cycle. The seed award highlights CPRIT's commitment to support start-up companies developing discovery stage data and/or a working prototype. Although grant applicants for the company product development award and the relocation company product development award may request up to \$20 million, CPRIT caps the seed award at \$3 million. The smaller grant amount is in line with the capital needs for a project at this stage. CPRIT funding is often among the first external funding for these development-stage companies. It is entirely consistent with the goal of seed award for grantees to seek additional, larger CPRIT product development grants to further develop the novel compound, diagnostic, device, or computational tool initially started with the seed grant.

Discussion

When the Oversight Committee approved increasing the matching fund requirement for second product development awards in 2017, the grantees affected by the change were receiving second grants that resulted in the total CPRIT grant fund commitment to exceed \$20 million. These second awards typically supported more capital-intensive Phase 1 and/or Phase 2 clinical trials undertaken by companies that had attracted outside investors based on strong early track records.

The introduction of the seed award mechanism in 2019 challenges some of the assumptions underlying the matching fund policy revision in 2017. Companies that have completed their seed award project (or other CPRIT-funded companies that received relatively modest product development grants) may have briefer operational histories and are not as likely to have attracted the same level of external funding as a company seeking its second \$10+ million grant from CPRIT. Imposing a higher matching funds requirement on these early-stage startups still in the preclinical stage may significantly impair the start of their second CPRIT-approved project or may cause the company to decline the award due to their inability to raise significantly more capital.

CPRIT's current matching funds policy provides the option for a company to request that the Oversight Committee waive the higher match amount. Even if CPRIT does not change the existing matching policy, grantees may use this option to address their specific situation. However, we believe that revising the policy is a better option and is more consistent with the original intent for increasing the matching funds amount.

As set forth below, the recommended proposal delinks the matching fund requirement from the *number of product development grants* received and is instead based on the *total amount of CPRIT funds committed* to the company.

Matching Funds Proposal

- A grantee approved for one or more product development grants that together total a commitment of \$20 million or less must dedicate to each grant project \$1 of their own funds for every \$2 of CPRIT grant award funds.
- A grantee approved for a product development grant award that causes the total amount of committed CPRIT product development grant award funds to exceed \$20 million must increase their matching fund obligation to \$1 for every \$1 contributed by CPRIT. The increased matching fund obligation applies to the grant award that caused the grantee to exceed the \$20 million threshold.

For example, a company receives three product development grant awards of \$3 million, \$15 million, and \$8 million (in that order) over the course of several years. Under the proposed policy, the company must dedicate \$8 million in matching funds to the \$8 million project (a dollar-for-dollar match obligation) because that project caused it to exceed the \$20 million threshold.

- A company approved for a grant award that would result in more than \$30 million in CPRIT product development grant funds must contribute \$2 for every \$1 provided by CPRIT. The increased matching fund obligation applies to the grant award that caused the grantee to exceed the \$30 million threshold.

Implementation

If approved by the Oversight Committee, the policy change will be effective for projects approved for funding on or after August 18, 2021. CPRIT will update requests for applications to reflect this rule change. Revising the matching funds policy does not limit CPRIT's option to require other non-standard contract terms, such as revenue sharing, should circumstances justify an alternative.

**August 2021 Oversight Committee
Internal Audit Status Report
As of August 2, 2021**

Weaver and Tidwell, LLP (Weaver) is the outsourced internal auditor of the Cancer Prevention Research Institute of Texas (CPRIT). The Weaver engagement team is led by Daniel Graves, Partner and Alyssa Martin, Partner.

2021 Internal Audit Plan and Schedule

Based on the approved 2021 Internal Audit Plan by the Oversight Committee, we have coordinated and planned the timing of the internal audits and follow-up procedures for the 2021 Internal Audit Plan.

2021 INTERNAL AUDITS		
Internal Audit	Description	Status
Sunset Self-Assessment Advisory Audit	<p>The advisory audit was planned to provide CPRIT a risk-based framework and an overlay of internal audits and controls in preparation for the Self-Assessment Report for the Sunset Commission Review. The advisory audit has been cancelled because there is a bill, SB 73, moving quickly through the legislature that changes CPRIT's sunset date from 2023 to 2029.</p> <p>Planning for the advisory audit, and the creation of the framework and mapping of audits to the Self-Assessment Report criteria were complete when SB 713 was voted out of the Senate Committee on Administration on April 14, 2021. It passed the Senate on April 19, and was voted out of the house State Affairs Committee on April 29</p>	Cancelled
Information Technology General Computer Controls	<p>The Internal Audit to evaluate the risks and internal controls in place related to CPRIT's Information Technology practices is underway.</p> <p>Initial planning meetings for the evaluation of Network Operations, Help Desk Support, Change Management, Website Maintenance, Back-Up and Recovery have been completed.</p> <p>The procedures to complete the internal audit are in-progress.</p>	Fieldwork In-Progress
Records Management – Grantee Compliance Records Advisory Audit	<p>Internal Audit will provide audit advisory services to evaluate the planning process for the grantee compliance record migration from a third-party designed system to the integrated CPRIT system. Evaluation of the designed process will include the validation of the system architecture design and data mapping of the file migration plan. Consulting services will also include the validation of the system configuration upon implementation, verification of the completeness of the data migration and testing the accuracy of data classification and mapping.</p>	September 2021

2021 INTERNAL AUDIT FOLLOW-UPS		
Information Security Follow-Up • 2 findings	Internal Audit will perform follow-up procedures on the open findings from the 2016 Internal Audit to ensure corrective action has been taken.	In-Progress with the IT Controls Audit
Communications Follow-Up • 1 High Finding • 2 Moderate Findings	Internal Audit will perform follow-up procedures on the 3 open findings from the 2018 Internal Audit to ensure corrective action has been taken.	In-Progress with the IT Controls Audit
Governance Follow-up • 1 Moderate Finding	Internal Audit will perform follow-up procedures on the open finding from the 2020 Internal Audit to ensure corrective action has been taken.	In-Progress with the IT Controls Audit
Disaster Recovery and Business Continuity Planning Advisory Follow-up	Internal Audit will perform follow-up procedures on the recommendations provided from the 2020 Advisory project to evaluate the corrective action and provide additional recommendations.	September 2021

We have prepared a summary schedule of audits, their status and a summary of the findings by risk rating. The schedule maps out the internal audit and follow-up procedures performed, by year, the report date, report rating, and the findings by risk rating. The summary schedule is attached.

We also facilitated an update of the internal audit risk assessment with CPRIT Management, and developed an Internal Audit Plan for fiscal year 2022. The 2022 Internal Audit Plan Draft is also attached.



Daniel Graves, CPA, Internal Auditor
Partner
Weaver and Tidwell L.L.P.



Alyssa G. Martin, CPA, MBA
Partner
Weaver and Tidwell L.L.P.

Cancer Prevention and Research Institute of Texas
 Schedule of Audits, Status, and Findings Summary
 As of August 2, 2021

Audit	Fiscal Year	Status/Timing	Report Date	Report Rating	Open Findings				Closed Findings				Total Findings				
					High	Mod	Low	Total	High	Mod	Low	Total	High	Mod	Low	Total	
Fiscal Year 2017																	
Training Program Internal Audit	2017	Complete	March 10, 2017	Strong	-	2	-	2	-	-	-	-	-	2	-	2	
Internal Agency Compliance	2017	Complete	April 17, 2017	Strong	-	1	-	1	-	-	-	-	-	1	-	1	
Pre-Award Grant Management	2017	Complete	May 30, 2017	Satisfactory	1	2	-	3	-	-	-	-	1	2	-	3	
Procurement and P-Card Internal Audit	2017	Complete	August 4, 2017	Satisfactory	-	7	2	9	-	-	-	-	-	7	2	9	
2016 Information Security Follow-Up	2017	Complete	May 30, 2017														
2016 Commodity and Service Contracts Follow-Up	2017	Complete	July 13, 2017	Strong	-	3	2	5	-	3	2	5	-	-	-	-	
2016 Revenue Follow-Up	2017	Complete	July 8, 2017	Strong	-	-	2	2	-	-	2	2	-	-	-	-	
2016 Cash Management Follow-Up	2017	Complete	July 13, 2017	Strong	-	1	-	1	-	1	-	1	-	-	-	-	
Fiscal Year 2017 Subtotal					1	16	6	23	-	4	4	8	1	12	2	15	
Fiscal Year 2018																	
Post Award Grant Monitoring Internal Audit	2018	Complete	February 1, 2018	Strong	-	1	-	1	-	-	-	-	-	1	-	1	
Grant Contracting Internal Audit																	
Communications Internal Audit	2018	Complete	April 30, 2018	Satisfactory	1	4	-	5	-	-	-	-	1	4	-	5	
2016 Information Security Follow-Up	2018	Complete	July 17, 2018														
2017 Training Program Follow-Up	2018	Complete	January 19, 2018	Strong	-	2	-	2	-	2	-	2	-	-	-	-	
2017 Internal Agency Compliance Follow-Up	2018	Complete	January 19, 2018	Strong	-	1	-	1	-	1	-	1	-	-	-	-	
2017 Pre-Award Grant Management Follow-Up	2018	Complete	April 24, 2018	Strong	1	2	-	3	1	2	-	3	-	-	-	-	
2017 Procurement and P-Card Follow-Up	2018	Complete	April 30, 2018	Strong	-	7	2	9	-	6	2	8	-	1	-	1	
Fiscal Year 2018 Subtotal					2	17	2	21	1	11	2	14	1	6	-	7	
Fiscal Year 2019																	
State Reporting Internal Audit	2019	Complete	January 16, 2019	Strong	-	-	2	2	-	-	2	2	-	-	-	-	
Budget and Planning	2019	Complete	January 16, 2019	Strong	-	-	-	-	-	-	-	-	-	-	-	-	
2017 SAO Performance Measures Follow-up	2019	Complete	December 6, 2018	Strong	-	-	3	3	-	-	3	3	-	-	-	-	
2016 Information Security Follow-Up	2019	Cancelled	N/A														
2018 Communications Follow-Up	2019	Complete	August 30, 2019	Satisfactory	1	4	-	5	-	2	-	2	1	2	-	3	
2018 Post Award Grant Monitoring Follow-Up																	
2018 Grant Contracting Follow-Up	2019	Complete	April 11, 2019	Strong	-	1	-	1	-	1	-	1	-	-	-	-	
2017 Procurement and P-Card Follow-Up	2019	Complete	August 1, 2019	Strong	-	7	2	9	-	7	2	9	-	-	-	-	
Fiscal Year 2019 Subtotal					1	12	7	20	-	10	7	17	1	2	-	3	
Fiscal Year 2020																	
Governance	2020	Complete	October 30, 2020	Strong	-	1	-	1	-	-	-	-	-	1	-	1	
Disaster Recovery and Business Continuity Planning	2020	Complete	October 28, 2020	N/A	-	-	-	-	-	-	-	-	-	-	-	-	
2016 Information Security Follow-Up	2020	Complete	N/A														
2018 Communications Follow-Up	2020	Complete	N/A	N/A	1	4	-	5	-	2	-	2	1	2	-	3	
2019 State Reporting Follow-Up	2020	Complete	July 20, 2020	Strong	-	-	2	2	-	-	2	2	-	-	-	-	
Fiscal Year 2020 Subtotal					1	5	2	8	-	2	2	4	1	3	-	4	
Fiscal Year 2021																	
Sunset Self-Assessment Advisory	2021	Cancelled	N/A	N/A	-	-	-	-	-	-	-	-	-	-	-	-	
Information Technology General Computer Controls	2021	In Progress	October 28, 2020	N/A	-	-	-	-	-	-	-	-	-	-	-	-	
Grantee Compliance Records Management	2021	September 2021	N/A	N/A													
2016 Information Security Follow-Up	2021	In Progress	N/A														
2018 Communications Follow-Up	2021	In Progress	N/A	N/A	1	4	-	5	-	2	-	2	1	2	-	3	
2020 Governance Follow-up	2021	In Progress	October 2020	Strong	-	1	-	1	-	-	-	-	-	-	-	1	
2020 Disaster Recovery and Business Continuity Follow-up	2021	September 2021	October 2020	N/A	-	-	-	-	-	-	-	-	-	-	-	-	
Fiscal Year 2021 Subtotal					1	5	-	6	-	2	-	2	1	2	-	4	
Open Items Summary																	
Audit	Fiscal Year	Status/Timing	Report Date	Report Rating	Findings				Closed Findings				Total Open Findings				Timing of Follow-Up Procedures by IA
					High	Mod	Low	Total	High	Mod	Low	Total	High	Mod	Low	Total	
2020 Governance	2020	July 2020	October 30, 2020	Strong	-	1	-	1	-	-	-	-	-	1	-	1	In Progress
2016 Information Security Follow-Up	2020	August 2020	N/A														In Progress
2018 Communications Follow-Up	2020	November 2020	N/A	N/A	1	4	-	5	-	2	-	2	1	2	-	3	In Progress
Total Findings For Internal Audit Follow-Up					1	5	-	6	-	2	-	2	1	3	-	4	

Cancer Research and Prevention Institute of Texas
Proposed Internal Audit Plan
Draft - For Discussion Purposes Only

Audit Area	Risk Rating	Summary Procedures	Audit Focus	Timing
2022 Planned New Internal Audits				
Vendor Contract Compliance	High	Internal Audit will evaluate the risk of significant vendor contracts in place at CPRIT. Based on the risk evaluation, vendor contracts will be evaluated for compliance with key provisions, terms and conditions of the contract, as well as on the performance with the delivery of goods and/or services in alignment with the contract.	Internal Audit	December 2021- January 2022
TAC 202 Alignment and Strategic Roadmap	High	Internal Audit will evaluate the alignment of the IT environment with the state agency IT requirements of Texas Administrative Code (TAC) 202 and its underlying control frameworks. The scope of the audit will also include the development and monitoring of the long-term strategic initiatives of information technology and its alignment with the strategic goals and initiatives of CPRIT.	Internal Audit	February/ March 2022
2022 Planned Internal Audit Follow-up				
Information Technology General Computer Controls	High	Internal Audit will perform possible follow-up procedures on the findings from the 2021 internal audit to ensure corrective action has been taken.	Follow-up	February 2022
Records Management - Grantee Compliance Records	High	Internal Audit will perform possible follow-up procedures on the findings from the 2021 internal audit advisory project to validate changes in operations.	Follow-up	April 2022
Special Projects		Special projects as directed and designated by CPRIT management.	Follow-up	TBD
2022 Planned Annual Requirements				
Project Management	NA	Track overall internal audit procedures, coordinate audit activities, and reporting to management.	Project Management	Ongoing
Update Risk Assessment	NA	Perform required annual update of risk assessment	Policy Compliance	Ongoing
Annual and Quarterly Board Reports	NA	Prepare and submit required Annual Internal Audit Report and quarterly reports of internal audit activities to the Audit Sub-Committee and Oversight Committee.	Policy Compliance	Ongoing



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: CAMERON ECKEL, ASSISTANT GENERAL COUNSEL
SUBJECT: APPOINTMENTS TO THE SCIENTIFIC RESEARCH AND
PREVENTION PROGRAMS COMMITTEE
DATE: AUGUST 6, 2021

Summary and Recommendation

The Chief Executive Officer has appointed four experts to CPRIT's Scientific Research and Prevention Programs Committee. CPRIT's statute requires Oversight Committee approval for the appointments. The Nominations Subcommittee will discuss the appointments at its meeting on August 13.

Discussion

Scientific Research and Prevention Programs committee members (also referred to as "peer reviewers") are responsible for reviewing grant applications and recommending grant awards for meritorious projects addressing cancer prevention and research, including product development research. Peer reviewers perform a significant role for the state; all CPRIT grant awards must first be recommended by a Scientific Research and Prevention Programs committee. Individuals appointed to serve as CPRIT's Scientific Research and Prevention Programs committee members must be exceptionally qualified, highly respected, well-established members of the cancer research, product development research, and prevention communities.

Texas Health and Safety Code Section 102.151(a) directs the Chief Executive Officer to appoint members to the Scientific Research and Prevention Programs committees. The CEO's appointments are final once approved by a simple majority of the Oversight Committee. The Nominations Subcommittee charter assigns the subcommittee with the responsibility "to circulate to Oversight Committee members in advance of a public meeting written notification of the committee's intent to make the nomination, along with such information about the nominee as may be relevant."

The nominations subcommittee will review the peer reviewer appointments at its August 13 meeting.

Academic Research Nominations for Peer Review Panels

Nominees	Panel Assignment	Expertise
<p>Robert Craig Castellino, MD Associate Professor Department of Pediatrics Emory University School of Medicine</p>	<p>Basic Cancer Research Panel-1</p>	<p>Pediatric hematologist/oncologist, brain tumor expert.</p>
<p>Benjamin Greenbaum, Ph.D. Associate Attending Computational Oncology Service Memorial Sloan Kettering Cancer Center New York, NY</p>	<p>Basic Cancer Research Panel -2</p>	<p>Mathematics and Systems Biology. Computational Immunology.</p>
<p>Benjamin J. Raphael, Ph.D. Department of Computer Science Princeton University Princeton, NJ</p>	<p>Basic Cancer Research Panel -2</p>	<p>Computational Biology, Computer Science, Mathematics and Biology.</p>
<p>Olga Troyanskaya, Ph.D. Professor, Deputy Director of Genomics Lewis-Sigler Institute for Integrative Genomics and the Department of Computer Science Princeton University Princeton, NJ</p>	<p>Basic Cancer Research Panel -2</p>	<p>Biomedical Informatics. Computational Analytics and Systems.</p>

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Castellino, Robert Craig

eRA COMMONS USER NAME (credential, e.g., agency login): rccastel

POSITION TITLE: Associate Professor

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
Duke University, Durham, NC	BME	05/1991	Mechanical Engineering
Massachusetts Institute of Technology, Cambridge, MA	MS	06/1993	Aeronautics & Astronautics
Duke University, Durham, NC	MD	05/1999	Medicine
Massachusetts General Hospital, Boston, MA	OTH	07/2002	Internship & Residency, Pediatrics
Baylor College of Medicine, Houston, TX	OTH	07/2005	Fellowship, Pediatric Hematology/Oncology

A. Personal Statement

I am a Board-certified pediatric hematologist/oncologist with a strong clinical and research interest in pediatric neuro-oncology. Beginning in fellowship and extending over the last 18 years, I have focused on mechanisms of the protein phosphatase, PPM1D, in the pathogenesis and treatment responsiveness of the pediatric high-grade brain tumors medulloblastoma (MB) and diffuse intrinsic pontine glioma (DIPG). We have shown that PPM1D is highly expressed or amplified in three of the four recognized MB subgroups. We have generated novel MB models and shown that PPM1D cross-talk with MDM2, Sonic hedgehog, and CXCR4 pathways promotes MB growth and dissemination. Since 2012 when initial studies identified PPM1D mutation (PPM1D^{mut}) in 25% of DIPGs, we have also been defining the role of PPM1D^{mut} in DIPG. Despite significant advances in the treatment and survival of most childhood cancers, DIPG is associated with a 99% chance of death. PPM1D mutation is believed to act downstream of the H3F3A K27M mutation to drive DIPG tumorigenesis. While others have demonstrated cooperation between H3f3a-K27M and p53 loss in DIPG models, the role of PPM1D remains unclear. Our 2019 Neuro Oncol publication shows that PPM1D mutations promote DIPG in patient-derived models. Importantly, we showed that these mutations are targetable and that PPM1D inhibition cooperates with ionizing radiation to suppress DIPG growth. This is novel, since TP53 mutations are not targetable. Our recent unpublished work suggests unique dependencies in PPM1D^{mut} DIPGs. In this research proposal, we will: 1) validate novel targets in PPM1D^{mut} DIPG, and 2) determine synergistic therapeutic vulnerabilities in PPM1D^{mut} DIPG. Despite the on-going pandemic which resulted in closure of my lab in 3/2020 and re-building of the lab when we were allowed to resume operations in 8/2020, I have a record of success in translational pediatric neuro-oncology. I have received Career Development Awards from AACR and St. Baldrick's, a premier funder of childhood cancer research. I previously received an R01 on MB biology and an Idea Award with Special Focus from the Department of Defense to study DIPGs. I have published multiple first- and senior-author clinical and translational manuscripts and book chapters on pediatric brain tumors. I have a record of successful collaboration in grant funding and publications with other brain tumor-focused faculty within and outside of Emory. I have been invited to speak at national and international venues on PI3-Kinase, p53, and PPM1D signaling in pediatric brain tumors. I previously served as Co-Chair of the Emory University Research Committee. I am a member of the Developmental Therapeutics Program of the Aflac Cancer & Blood Disorders Center, which designs and manages institutional, national, and international Phase I/II pediatric oncology clinical trials. I am the local PI of a Pediatric Brain Tumor Consortium Trial, PBTC-056, examining toxicity and efficacy of an ADAM-10 inhibitor in DIPG. Nationally, I have served on multiple NIH, DOD, and pediatric cancer-specific study sections. Not only am I recognized as a pediatric brain tumor expert; but, I am cognizant of gaps in our understanding of pediatric brain tumor biology. I understand what constitutes a sound scientific approach in the study of pediatric brain tumor biology and how basic science advances can be translated into novel treatments in pediatric neuro-oncology.

1. Nahta R, Castellino RC. Phosphatase magnesium-dependent 1 δ (PPM1D), serine/threonine protein phosphatase and novel pharmacological target in cancer. *Biochem Pharmacol.* 2021 Feb;184:114362. PubMed PMID: 33309518.
2. Akamandisa MP, Nie K, Nahta R, Hambardzumyan D, Castellino RC. Inhibition of mutant PPM1D enhances DNA damage response and growth suppressive effects of ionizing radiation in diffuse intrinsic pontine glioma. *Neuro Oncol.* 2019 Jun 10;21(6):786-799. PubMed Central PMCID: PMC6556861.

B. Positions and Honors

Positions and Employment

2017 - 2019	Co-Chair, University Research Committee, Emory University, Atlanta, GA
2016 -	Associate Professor, Department of Pediatrics, Division of Hematology/Oncology, Emory University School of Medicine, Atlanta, GA
2014 - 2017	Chair, University Research Committee, Health and Biological Sciences Sub-Committee, Emory University, Atlanta, GA
2012 - 2015	Assistant Professor, Department of Pediatrics, Division of Hematology/Oncology, Emory University School of Medicine, Atlanta, GA
2007 -	Professional Staff, Pediatric Heme/Onc, Children's Healthcare of Atlanta, Atlanta, GA
2007 - 2009	Instructor, Pediatric Heme/Onc, Emory University School of Medicine, Atlanta, GA
2005 - 2007	Instructor, Pediatric Heme/Onc, Baylor College of Medicine, Houston, TX
2002 - 2005	Clinical Postdoctoral Fellow, Pediatric Heme/Onc, Baylor College of Medicine, Houston, TX
2000 - 2002	Clinical Fellow, Department of Pediatrics, Massachusetts General Hospital, Boston, MA
1999 - 2000	Instructor in Pediatrics, Massachusetts General Hospital, Boston, MA

Other Experience and Professional Memberships

2009 - 2014	Member, Scientific Review Committee, St. Baldrick's Foundation
2014 - 2016	Ad Hoc Reviewer, Molecular Oncogenesis (MONC) Study Section, NIH
2015 - 2017	Ad Hoc Reviewer, Tumor Microenvironment (TME) Study Section, NIH
2018 - 2019	Ad Hoc Reviewer, PRCRP-Peer Review Panel, Department of Defense
2019 -	Ad Hoc Reviewer, Cancer Etiology (CE) Study Section, NIH
2020 -	Chair, PRCRP-Peer Review Panel, Department of Defense
2021 -	Ad Hoc Reviewer, SPORE (P50) Study Section, NIH

Honors

2020	Hyundai Hope Scholar, Hyundai Hope on Wheels
2013	Springboard Grant, Alex's Lemonade Stand Foundation
2009	Career Development (Scholar) Award, St. Baldrick's Foundation
2009	Clinical Translational Research Career Development Award in Pediatric Cancer (declined due to overlap with St. Baldrick's Scholar Award), Harriet H. Samuelsson Foundation and Larry and Helen Hoag Foundation
2007	Career Development Award for Pediatric Cancer Research, American Association for Cancer Research-Aflac, Inc.
2006	Molecular Medicine Scholar Award (HL6691-04 and HL6691-05), Baylor College of Medicine/NIH
2006	Young Investigator Award, Alex's Lemonade Stand Foundation
2003	T32 Pediatric Fellowship Training Award (HD042977-01A1), Baylor College of Medicine/NIH
1991	Charles Stark Draper Fellowship in Aeronautics, Massachusetts Institute of Technology
1988	General Motors Full-Tuition Scholarship, Duke University

C. Contribution to Science

1. PTEN dephosphorylates phosphatidylinositol-3,4,5-triphosphate (PIP3), and is a major inhibitor of signaling through the phosphatidylinositol 3-kinase (PI-3 kinase) pathway. Activation of PI-3 kinase signaling is a major driving force in progression of a majority of human neoplasms, including brain tumors. I was one of the first investigators to show that either loss or reduced expression of PTEN is prognostic in medulloblastoma and that Pten deficiency activates PI-3 kinase signaling and accelerates tumorigenesis in mouse models of medulloblastoma. Conversely, treatment of human and murine medulloblastoma cells with the multi-tyrosine kinase inhibitor, sunitinib increases the expression of PTEN and significantly inhibits PDGFR signaling, which is vital to the survival and migration of medulloblastoma cells. This highlights the importance of PI-3 kinase signaling in medulloblastoma tumorigenesis and dissemination and provides a novel mouse model for studies of PI-3 kinase inhibition in medulloblastoma treatment.
 - a. Abouantoun TJ, Castellino RC, MacDonald TJ. Sunitinib induces PTEN expression and inhibits PDGFR signaling and migration of medulloblastoma cells. *J Neurooncol.* 2011 Jan;101(2):215-26. PubMed Central PMCID: PMC2997175.
 - b. Castellino RC, Barwick BG, Schniederjan M, Buss MC, Becher O, Hambardzumyan D, Macdonald TJ, Brat DJ, Durden DL. Heterozygosity for Pten promotes tumorigenesis in a mouse model of medulloblastoma. *PLoS One.* 2010 May 26;5(5):e10849. PubMed Central PMCID: PMC2877103.
 - c. Castellino RC, Durden DL. Mechanisms of disease: the PI3K-Akt-PTEN signaling node--an intercept point for the control of angiogenesis in brain tumors. *Nat Clin Pract Neurol.* 2007 Dec;3(12):682-93. PubMed PMID: 18046441.
 - d. Sturla LM, Cowan CW, Guenther L, Castellino RC, Kim JY, Pomeroy SL. A novel role for extracellular signal-regulated kinase 5 and myocyte enhancer factor 2 in medulloblastoma cell death. *Cancer Res.* 2005 Jul 1;65(13):5683-9. PubMed PMID: 15994942.
2. Although the master tumor suppressor, TP53, is mutated in >50% of adult malignancies, <10% of medulloblastomas harbor an inactivating mutation of TP53. I was the first to show that human medulloblastoma samples and cell lines express full-length (TAp73) and amino-terminal-truncated variants of the TP53 family member, TP73, in 100-fold excess compared to non-neoplastic brain controls. We identified a trend toward favorable overall and progression-free survival in patients whose tumor displays overexpression of TAp73. Overexpression of TAp73 in medulloblastoma cell lines induced apoptosis under basal growth conditions and sensitized them to cell death in response to chemotherapy. We were also one of the first groups to identify high expression or amplification of the WIP1 (PPM1D) oncogene in the medulloblastomas with gain of chromosome 17q or isochromosome 17q (i17q), the most common cytogenetic lesion in medulloblastoma. WIP1 overexpression antagonized p53-mediated apoptosis in medulloblastoma cell lines. Our findings were some of the first to show that p53 function in medulloblastoma can be regulated by mechanisms other than mutation of TP53 itself.
 - a. Castellino RC, De Bortoli M, Lu X, Moon SH, Nguyen TA, Shepard MA, Rao PH, Donehower LA, Kim JY. Medulloblastomas overexpress the p53-inactivating oncogene WIP1/PPM1D. *J Neurooncol.* 2008 Feb;86(3):245-56. PubMed Central PMCID: PMC2174521.
 - b. Castellino RC, De Bortoli M, Lin LL, Skapura DG, Rajan JA, Adesina AM, Perlaky L, Irwin MS, Kim JY. Overexpressed TP73 induces apoptosis in medulloblastoma. *BMC Cancer.* 2007 Jul 12;7:127. PubMed Central PMCID: PMC1955450.
3. WIP1 (PPM1D) on chromosome 17q22-23, is an important regulator of DNA damage response, which is mediated in part through the tumor suppressor p53. When expressed at high levels, WIP1 functions as an oncogene. And, WIP1 amplification or overexpression has been described in a variety of malignancies, including aggressive pediatric brain tumors such as MB. We showed that stable, high expression of WIP1 enhances growth of TP53 wild-type MB cells in vitro and in orthotopic xenografted MB mouse models. This was in part due to increased expression of the major p53 regulator, HDM2. Knockdown or pharmacologic inhibition of HDM2 or WIP1 inhibited downstream signaling as well as the growth of WIP1 high-expressing MB cells. Combined inhibition of WIP1 and HDM2 was more effective than WIP1 inhibition alone in inhibiting MB growth. We were also the first to show increased WIP1 expression in metastatic MBs, and inferior progression-free and overall survival of patients with WIP1 high-expressing MB. We found

upregulation of genes involved in metastasis, including CXCR4, in MB cells with high WIP1 expression. Stimulation of CXCR4 activated PI-3 kinase signaling, and promoted growth and invasion of WIP1 high-expressing MB cells. In an orthotopic model, MB cells with stable or endogenous high WIP1 expression exhibited strong expression of CXCR4 and activated AKT in primary and invasive tumor cells. Conversely, WIP1 or CXCR4 knockdown inhibited MB growth and invasion. WIP1 knockdown inhibited cell surface localization of CXCR4 by suppressing expression of the G protein receptor kinase 5, GRK5. This demonstrated cross-talk among WIP1, CXCR4 and GRK5, which may be important in aggressive subtypes of MBs, and raised the possibility of molecularly-targeted therapy for MBs with wild-type TP53. Finally, we recently demonstrated important cross-talk between WIP1 and Sonic Hedgehog (SHH) signaling that promotes MB and that may be targetable using small molecule inhibitors of SHH and WIP1.

- a. Wen J, Lee J, Malhotra A, Nahta R, Arnold AR, Buss MC, Brown BD, Maier C, Kenney AM, Remke M, Ramaswamy V, Taylor MD, Castellino RC. WIP1 modulates responsiveness to Sonic Hedgehog signaling in neuronal precursor cells and medulloblastoma. *Oncogene*. 2016 Oct 20;35(42):5552-5564. PubMed Central PMCID: PMC5069081.
 - b. Akamandisa MP, Nahta R, Castellino RC. *PPM1D/WIP1* in medulloblastoma. *Oncoscience*. 2016;3(7-8):186-187. PubMed Central PMCID: PMC5043068.
 - c. Buss MC, Remke M, Lee J, Gandhi K, Schniederjan MJ, Kool M, Northcott PA, Pfister SM, Taylor MD, Castellino RC. The WIP1 oncogene promotes progression and invasion of aggressive medulloblastoma variants. *Oncogene*. 2015 Feb 26;34(9):1126-40. PubMed Central PMCID: PMC4722800.
 - d. Buss MC, Read TA, Schniederjan MJ, Gandhi K, Castellino RC. HDM2 promotes WIP1-mediated medulloblastoma growth. *Neuro Oncol*. 2012 Apr;14(4):440-58. PubMed Central PMCID: PMC3309853.
4. PPM1D mutation is present in up to 25% of DIPGs, a pediatric brain tumor that is currently not curable. We found that PPM1D-mutated DIPG cell lines exhibited increased proliferation in vitro and in vivo, conferring reduced survival in orthotopically-xenografted mice, through stabilization of truncated PPM1D and inactivation of DNA damage response (DDR) effectors p53 and H2A.X. PPM1D knock-down or treatment with PPM1D inhibitors suppressed growth of PPM1D-mutated DIPGs in vitro. Orthotopic xenografting of PPM1D shRNA-transduced or PPM1D inhibitor-treated, PPM1D-mutated DIPG cells into immunodeficient mice resulted in reduced tumor proliferation, increased apoptosis, and extended mouse survival. PPM1D inhibition had similar effects to IR alone on DIPG growth inhibition and augmented the anti-proliferative and pro-apoptotic effects of IR in PPM1D-mutated DIPG models. Our results support continued development of PPM1D inhibitors for Phase I/II trials in children with DIPG.
- a. Nahta R, Castellino RC. Phosphatase magnesium-dependent 1 δ (PPM1D), serine/threonine protein phosphatase and novel pharmacological target in cancer. *Biochem Pharmacol*. 2021 Feb;184:114362. PubMed PMID: 33309518.
 - b. Akamandisa MP, Nie K, Nahta R, Hambardzumyan D, Castellino RC. Inhibition of mutant PPM1D enhances DNA damage response and growth suppressive effects of ionizing radiation in diffuse intrinsic pontine glioma. *Neuro Oncol*. 2019 Jun 10;21(6):786-799. PubMed Central PMCID: PMC6556861.
5. Historically, metastatic spread and disease recurrence have been associated with an extremely poor prognosis for survival in pediatric brain tumor patients. Improvements in our understanding of the molecular pathways that govern tumor formation, progression, and dissemination suggest druggable molecular targets for improving the survival and treatment of children diagnosed with a brain tumor. At the Aflac Cancer & Blood Disorders Center, we follow one of the largest cohorts of children in the US who have been diagnosed with a brain tumor. We were one of the first groups to demonstrate marked improvement in progression-free survival using bevacizumab, irinotecan, and temozolomide in children with relapsed medulloblastoma. Through case reports, we have also demonstrated the potential of molecularly-targeted therapies in the treatment of metastatic or recurrent low-grade brain tumors in children.

- a. Spyris CD, Castellino RC, Schniederjan MJ, Kadom N. High-Grade Gliomas in Children with Neurofibromatosis Type 1: Literature Review and Illustrative Cases. AJNR Am J Neuroradiol. 2019 Feb;40(2):366-369. PubMed Central PMCID: PMC7028622.
- b. Castellino RC, Kenney AM. Atoh1/MATH1 Adds Up to Ciliogenesis for Transducing SHH Signaling in the Cerebellum. Dev Cell. 2019 Jan 28;48(2):129-130. PubMed PMID: 30695693.
- c. Aguilera D, Janss A, Mazewski C, Castellino RC, Schniederjan M, Hayes L, Brahma B, Fogelgren L, MacDonald TJ. Successful Retreatment of a Child with a Refractory Brainstem Ganglioglioma with Vemurafenib. Pediatr Blood Cancer. 2016 Mar;63(3):541-3. PubMed PMID: 26579623.
- d. Aguilera D, Mazewski C, Fangusaro J, MacDonald TJ, McNall-Knapp RY, Hayes LL, Kim S, Castellino RC. Response to bevacizumab, irinotecan, and temozolomide in children with relapsed medulloblastoma: a multi-institutional experience. Childs Nerv Syst. 2013 Apr;29(4):589-96. PubMed Central PMCID: PMC3963487.

Complete List of Published Work in My Bibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/1FQVvh17KBTQC/bibliography/public/>

D. Scholastic Performance

Ongoing Research Support

Bridge Grant, Emory University School of Medicine

Castellino, Robert (PI)

07/01/2021-06/30/2021

PPM1D mutation in diffuse intrinsic pontine glioma (DIPG)

The generate preliminary data in support of submission of an R01 application on the activity of mutant PPM1D in the pathogenesis and treatment responsiveness of diffuse intrinsic pontine glioma (DIPG).

Role: PI

Translational Research Grant, CURE Childhood Cancer Foundation

Castellino, Robert (PI)

07/01/2021-06/30/2021

Identifying and targeting therapeutic vulnerabilities in DIPG

To validate interactions between mutant PPM1D and known targetable genetic alterations in human DIPGs and determine synergistic drug combinations for DIPG treatment.

Role: PI

Hope Scholar Grant, Hyundai Hope on Wheels Foundation

Castellino, Robert (PI)

01/01/20-12/31/21 (NCE)

The role of PPM1D in the pathogenesis and treatment responsiveness of Group 3 medulloblastoma

To determine mechanisms of interaction between cMyc and PPM1D and pharmacologically target these pathways in models of Group 3 medulloblastoma.

Role: PI

Translational Research Grant, CURE Childhood Cancer Foundation

Castellino, Robert (PI)

07/01/19-12/30/21 (NCE)

PPM1D in high-risk, non-SHH, non-WNT medulloblastoma

To determine mechanisms of interaction between cMyc and PPM1D and pharmacologically target these pathways in models of non-SHH, non-WNT medulloblastoma.

Role: PI

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Greenbaum, Benjamin Dylan

eRA COMMONS USER NAME (credential, e.g., agency login): BGREENBAUM

POSITION TITLE: Associate Attending, Department of Epidemiology and Biostatistics, Computational Oncology Service

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Columbia College, Columbia University, New York, NY	B.A.	05/1997	Physics Philosophy, Mathematics
Graduate School of Arts and Sciences, Columbia University, New York, NY	Ph.D.	10/2006	Theoretical Physics
BioMaPS, Rutgers University, Piscataway, NJ	Postdoctoral	07/2008	Systems Biology
Simons Center for Systems Biology, Institute for Advanced Study, Princeton, NJ	Postdoctoral	08/2013	Systems Biology

A. Personal Statement

My research focuses on novel quantitative approaches to studying the rapidly evolving genomes of tumors interact with the immune system, and how they often manipulate viral strategies to do so. In particular, my current research emphasizes how the interaction between tumors and the immune system shapes tumor evolution and response to immunotherapy and, for this work, I was named founding director of the Center for Computational Immunology at the Tisch Cancer Institute. Our lab has developed new methods and approaches to studying this problem in collaboration with multiple colleagues across many institutions, such as Memorial Sloan-Kettering, the Institute for Advanced Study, Massachusetts General Hospital, École Normale Supérieure, and Princeton University. We have published several papers on quantifying mechanisms of tumor immunology and response to immunotherapy, the innate activation of the tumor microenvironment, and modeling neoantigen driven tumor evolution.

Ongoing and recently completed projects that I would like to highlight include:

U01CA224175 (PI: Balachandran)

09/01/2020 - 08/31/2022

Defining neoantigen immunodominance for antigen selection and biomarker discovery in human pancreatic cancer immunotherapy

Goal: The proposal utilizes several highly unique tissue collection strategies - laparoscopic multi-site biopsies to identify stage-specific heterogeneity, serial pre and post chemotherapy assessment for treatment-specific modulation, and evaluation of neoantigen quality as a predictive biomarker on a large, immunotherapeutic PDAC trial.

Role: Investigator

R01AI081848 (PI: Bhardwaj)

09/01/2020 - 08/31/2022

Exposing virus-induced long noncoding RNA in plasmacytoid dendritic cell

Goal: The major goals of this study are (1) Apply RNA sequencing to identify unique virus-induced lnc RNA in human pDC, (2) Functionally define lncRNA that are positive-regulators of IFN response in pDC and, (3) Identify and functionally define lncRNA that are negative-regulators of IFN response in pDC.

Role: Principal Investigator

Lustgarten Foundation – Stand Up to Cancer (PI: Greenbaum) 05/01/2020 - 12/31/2021
Computational deconstruction of neoantigen-TCR degeneracy for cancer immunotherapy
Goal: The goal of this proposal is to quantify the interplay between the endogenous T cell receptor repertoire, cancer neoantigens, and the host microbiome in human pancreatic cancer. We will leverage these studies to inform an adjuvant neoantigen vaccine clinical trial.
Role: Principal Investigator

Pershing Square Sohn Prize – Mark Foundation (PI: Greenbaum) 06/10/2020 - 06/20/2021
Towards Predictive Models of Immunotherapy Response
Goal: The goal of this proposal is to use our approach as an overarching framework for turning information about the tumor and its environment into improved predictions of response and create a unique computational platform for rapidly doing so. The awardee was chosen for an additional Mark Foundation Investigator Award.
Role: Principal Investigator

Stand Up To Cancer (PI: Vonderheide) 04/06/2020 - 06/30/2021
Antigenicity of mutant Kras and impact on cancer evolution
Goal: The goal of this proposal is identifying in silico predicted immunogenicity of neopeptide-MHC I pairs as proposed. We aim to infer specific mKras/MHC-I pairs incompatible with tumor growth in vivo to assess HLA typing as a novel method of risk interception.
Role: Principal Investigator

Pershing Square Sohn Cancer Research Alliance (PI: Greenbaum) 07/01/2020 - 06/30/2021
Etiology and Immune Repertoire Evolution in SARS-CoV-2 in Patients Treated with Checkpoint Blockade Immunotherapies
Goal: Our goal is to determine how COVID-19 shapes response to non-small cell lung cancer (NSCLC) in patients treated with anti-PD1 at Memorial Sloan Kettering Cancer Center.
Role: Principal Investigator

R01CA240924 (PI: Ting) 07/1/2020 - 06/30/2024
Reverse Transcriptase Inhibitor Effects on the Microbiome of Colon Cancer
Goal: Our goal is to perform computational analysis of repetitive elements with the intent of assessing the likelihood of their triggering immune recognition based on novel computational methods developed in the lab.
Role: Principal Investigator

V Foundation for Cancer Research Grant (PI: Greenbaum) 08/01/2020 - 11/01/2021
Therapeutic modulation of repeat RNAs
Goal: The goal of this specific project is improving our understanding of the evolution and transcription of repetitive elements in the genome will lead to improved use of repeats as biomarkers. Such work may also improve our understanding of the interplay between repeat expression and immune microenvironment.
Role: Principal Investigator

U01CA228963 (PI: Greenbaum) 09/15/2020 - 08/31/2025
A Statistical Physics Framework for Understanding the Role of Repeat RNA in Tumor Immunity
Goal: Our goal is to identify the classes of structural and sequence features of repeat mediated immune activation in solid tumors and clarify their specific consequences for tumor evolution, the state of the immune microenvironment, and cancer immunotherapies.
Role: Principal Investigator

The Mark Foundation for Cancer Research (PI: Wolchok) 08/01/2019 - 07/31/2022
Expanding Therapeutic Options for Lung Cancer (EXTOL) in memory of Waun Ki Hong
Goal: This project's objective is to determine how targeted therapies and immunotherapies can be optimized and integrated in order to improve the outcomes of patients with KRAS-mutant lung cancer. We hypothesize that the interactions between oncoprotein-activated pathways and the immune microenvironment regulate tumor growth, and this information can be applied to develop rational combination therapies. We propose to continue the interdisciplinary research of the Stand Up 2 Cancer Lung Cancer Dream Team to examine new hypotheses, expand therapeutic options and improve the outcomes for patients suffering from KRAS-mutant lung cancers.

Role: Investigator

P01CA087497 (PI: Cordon-Cardo)

05/09/2017 - 03/31/2018

The Molecular Systems Pathology Core

Goal: Support the overall goals of the Program through the application of novel technologies in the areas of object-oriented image analysis, pattern recognition, and quantitative biomarker multiplexing.

Role: Investigator

National Science Foundation (PI: Drebin)

09/01/2016 - 09/01/2019

Liberating T-Cell Mediated Immunity to Pancreatic Cancer

Goal: The goal is to understand the role of the innate immune system in the pancreatic cancer microenvironment and use that information to enhance the responsiveness of pancreatic cancer to novel immune therapies.

Role: Investigator

R21CA223953 (PI: Parekh)

01/01/2018 - 12/31/2019

Patient-Specific Mutation-Derived Tumor Neoantigens as Targets for Cancer Immunotherapy in Smoldering Multiple Myeloma

Goal: Our long-term goal is to develop a combination therapy of immune checkpoint blockade with effective MTA-based personalized vaccines administered early in the disease trajectory, i.e. at SMM, deferring progression to an active MM and ultimately increasing survival in this fatal disease.

Role: Investigator

Citations:

- a. Roudko, V., Bozkus, C.C., Orfanelli, T., McClain, C.B., Carr, C., O'Donnell, T., Chakraborty, L., Samstein, R., Huang, K.L., Blank, S.V., **Greenbaum, B.D.***, Bhardwaj, N*. (2020). Shared Immunogenic Poly-Epitope Frameshift Mutations in Microsatellite Unstable Tumors. *Cell*, 183(6):1634-1649. PMID: PMC8025604.
- b. Solovyov, A., Vabret, N., Arora, K.S., Funt, S.A., Bajorin, D.F., Rosenberg, J.E., Bhardwaj, N., Ting, D.T., Greenbaum B.D. (2018). Global Cancer Transcriptome Quantifies Repeat Element Polarization Between Immunotherapy Responsive and T cell Suppressive Classes. *Cell Reports*, 23(2):512-521. PMID: PMC6016853.
- c. Łuksza, M., Riaz, N., Makarov, V., Balachandran, V., Hellmann, M., Solovyov, A., Rizvi, N., Merghoub, T., Levine, A., Chan, T., Wolchok, J., **Greenbaum, B.D.** (2017). A neoantigen fitness model predicts tumor response to checkpoint-blockade immunotherapy. *Nature*, 551(7681):517-520. PMID: PMC6137806.
- d. Balachandran, V.P., Łuksza, M., Zhao, J.N., Makarov, V., Remark, R., Herbst, B., Askan, G., Bhanot, U., Senbabaoglu, Y., Wells, D.K., Cary, C.I.O., Grbovic-Huezo, O., Moral, J.A., Medina, B., Zhang, J., Loo, J., Saglimbeni, J., Abu-Akeel, M., Zappasodi, R., Riaz, N., Smoragiewicz, M., Larkin, K., Basturk, O., Gönen, M., Levine, A.J., Allen, P.J., Fearon, D.T., Merad, M., Gnjatic, S., Wolchok, J.D., DeMatteo, R.P., Chan, T.A., **Greenbaum, B.D.**, Merghoub, T.*, Leach, S.D.* (2017). Neoantigen quality and an immunogenic hotspot define long term pancreatic cancer survivors. *Nature*, 551(7681):512-516. PMID: PMC6145146.

B. Positions, Scientific Appointments, and Honors

Positions and Scientific Appointments

2021-	Associate Professor, Weill Cornell Medical College, Cornell University
2020-	Program Leader, Computational Immuno-oncology, Memorial Sloan Kettering Cancer Center
2020-	Associate Member, Memorial Sloan Kettering Cancer Center
2019-2020	Associate Attending Computational Oncologist, Department of Epidemiology & Biostatistics
2019-2020	Associate Professor, Icahn School of Medicine at Mount Sinai, Departments of Medicine, Hematology and Medical Oncology, Pathology and Oncological Sciences
2019-2020	Director, Center for Computational Immunology, Icahn School of Medicine at Mount Sinai
2017-2020	Member, Icahn Institute for Genetics and Multiscale Biology, Icahn School of Medicine at Mount Sinai
2017-2020	Member, Precision Immunology Institute, Icahn School of Medicine at Mount Sinai
2016-2019	Assistant Professor, Icahn School of Medicine at Mount Sinai, Department of Oncological Sciences
2013-2019	Assistant Professor, Icahn School of Medicine at Mount Sinai

2010-2013 Departments of Medicine, Hematology and Medical Oncology and Pathology
 Long-Term Member, Institute for Advanced Study, Simons Center for Systems Biology
 2008-2010 Member, Institute for Advanced Study, Simons Center for Systems Biology
 2007-2008 Postdoctoral Researcher, Rutgers University, BioMaPS Institute for Quantitative Biology
 2001-2006 Graduate Research Assistant, Los Alamos National Laboratory, Theoretical Division

Other Experience and Professional Memberships

2015- Member, American Association for Cancer Research
 2013- Visiting Associate, The Simons Center for Systems Biology, Institute for Advanced Study
 2013-2017 Visiting Professor, Leibler Laboratory, The Rockefeller University
 2011-2013 Visiting Fellow, Leibler Laboratory, The Rockefeller University
 2009-2011 Visiting Fellow, Rabadan Laboratory, Columbia University
 2009- Member, The New York Academy of Sciences
 2006- Member, American Physical Society

Honors

2019 NextGen Innovator, HemOnc Today
 2018 Mark Foundation Investigator Award
 2018 Pershing Square Sohn Prize for Young Investigators in Cancer Research
 2016 Phil A. Sharp Award for Innovation in Collaboration, Stand Up to Cancer
 2015 Selected for Stand Up to Cancer Convergence Ideas Lab
 2010-2013 Voted Long-Term Member, Simons Center for Systems Biology, Institute for Advanced Study
 2008-2013 Eric Wendy Schmidt Member, Simons Center for Systems Biology, Institute for Advanced Study
 2007-2008 Ruth L Kirschstein National Research Service Award, National Institute of Health
 1997-1999 Graduate Assistance in Areas of National Need Fellow, National Science Foundation
 1997 Charles Boyer Prize in the History and Philosophy of Science, Columbia University

C. Contributions to Science

Complete list of work available on PubMed (My Bibliography):

<https://www.ncbi.nlm.nih.gov/sites/myncbi/benjamin.greenbaum.1/bibliography/54151435/public/?sort=date&direction=ascending>

1. I have made several contributions to understanding the role neoantigens play in tumor evolution. In particular I have created mathematical models to predict response to checkpoint blockade immunotherapy and patients whose tumors are likely to be under immunosurveillance. This modeling has now led to clinical trials applying these results to vaccine design.
 - a. Łuksza, M., Riaz, N., Makarov, V., Balachandran, V., Hellmann, M., Solovyov, A., Rizvi, N., Merghoub, T., Levine, A., Chan, T., Wolchok, J., **Greenbaum, B.D.** (2017). Neoantigen fitness model predicts tumor response to checkpoint-blockade immunotherapy. *Nature*, 551(7681):517-520. PMID: PMC6137806.
 - b. Balachandran, V.P., Łuksza, M., Zhao, J.N., Makarov, V., Remark, R., Herbst, B., Askan, G., Bhanot, U., Senbabaoglu, Y., Wells, D.K., Cary, C.I.O., Grbovic-Huezo, O., Moral, J.A., Medina, B., Zhang, J., Loo, J., Saglimbeni, J., Abu-Akeel, M., Zappasodi, R., Riaz, N., Smoragiewicz, M., Larkin, K., Basturk, O., Gönen, M., Levine, A.J., Allen, P.J., Fearon, D.T., Merad, M., Gnjatic, S., Wolchok, J.D., DeMatteo, R.P., Chan, T.A., **Greenbaum, B.D.**, Merghoub, T.*, Leach, S.D.*. (2017). Neoantigen quality and an immunogenic hotspot define long term pancreatic cancer survivors. *Nature*, 551(7681):512-516. PMID: PMC6145146
 - c. Chowell, D., Morris, G.T.L.* ,Grigg, M.C.* ,Weber, K.J., Samstein, M.R., Makarov, V., Fengshen, K., Sviatoslav, M.K., Requena, D., Riaz, N., **Greenbaum, B.**, Carroll, J., Garon, E., Hyman, D.M., Zehir, A., Solit, D., Berger, M., Zhou, R., Rizvi, N.A.*, Chan, T.A*. (2018). Patient HLA class I genotype influences cancer response to checkpoint blockade immunotherapy. *Science*, 359(6375):582-587. PMID: PMC6057471.
 - d. Roudko, V., Bozkus, C.C., Orfanelli, T., McClain, C.B., Carr, C., O'Donnell, T., Chakraborty, L., Samstein, R., Huang, K.L., Blank, S.V., **Greenbaum, B.D.***, Bhardwaj, N. (2020). Shared Immunogenic Poly-Epitope Frameshift Mutations in Microsatellite Unstable Tumors. *Cell*, 183(6):1634-1649. PMID: PMC8025604.

2. I have made several contributions to understanding the manner in which the innate immune system is activated in tumors and how innate activation affects properties of the tumor immune microenvironment. In particular, we have brought new approaches to the question of whether self-RNA mimic viral features and how this alters the course of tumor evolution.
 - a. Tanne, A., Muniz, L., Puzio-Kuter, A., Leonova, K., Gudkov, A., Ting, D., Monasson, R., Cocco, S., Levine, A., Bhardwaj, N., **Greenbaum, B.** (2015). Distinguishing the immunostimulatory properties of non-coding RNAs expressed in cancer cells, *Proceedings of the National Academy of Sciences*, 112(49), 15154-15159. PMID: PMC4679042.
 - b. Solovyov, A., Vabret, N., Arora, K.S., Cocco, S., Monasson, R., Snyder, A., Funt, S.A., Bajorin, D.F., Rosenberg, J.E., Bhardwaj, N., Ting, D.T., **Greenbaum, B.D.** (2018). Global Cancer Transcriptome Quantifies Repeat Element Polarization Between Immunotherapy Responsive and T cell Suppressive Classes. *Cell Reports*, 23(2):512-521. PMID: PMC6016853.
 - c. Lavin, Y., Kobayashi, S., Leader, A., Amir, E.D., Elefant, N., Bigenwald, C., Remark, R., Sweeney, R., Becker, C.D., Levine, J.H., Meinhof, K., Chow, A., Kim-Shulze, S., Wolf, A., Medaglia, C., Li, H., Rytlewski, J.A., Emerson, R.O., Solovyov, A., **Greenbaum, B.D.**, Sanders, C., Vignali, M., Beasley, M.B., Flores, R., Gnjjatic, S., Pe'er, D., Rahman, A., Amit, I., Merad, M. (2017). Innate immune landscape in early lung adenocarcinoma by paired single-cell analyses. *Cell* 169(4):750–765. PMID: PMC5737939.
 - d. Badal, B., Solovyov, A., Di Cecilia, S., Chan, J.M., Chang, L.W., Iqbal, R., Aydin, I.T., Rajan, G.S., Chen, C., Abbate, F., Arora, K.S., Tanne, A., Gruber, S.B., Johnson, T.M., Fullen, D.R., Raskin, L., Phelps, R., Bhardwaj, N., Bernstein, E., Ting, D.T., Brunner, G., Schadt, E.E., **Greenbaum, B.D.***, Celebi, J.T.* (2017). Transcriptional dissection of melanoma identifies a high-risk subtype underlying TP53 family genes and epigenome deregulation. *JCI insight*, 2(9). PMID: PMC5414564.
3. I made several key contributions to understanding the interaction between nucleic acids and the innate immune system, a key initiator of tumor immunity. We predicted used virus evolution to discover patterns of sequence motifs that engage the innate immune system. We have participated in ongoing interdisciplinary collaborations to validate these predictions.
 - a. Jimenez-Baranda, S.* **Greenbaum, B.***, Manches, O., Handler, J., Rabadan, R., Levine, A., Bhardwaj, N. (2011). Oligonucleotide motifs that disappear during the evolution of influenza in humans increase IFN- α secretion by plasmacytoid dendritic cells. *Journal of Virology*, 85(8), 3893-3904. PMID: PMC3126114.
 - b. Vabret, N., Bhardwaj, N., **Greenbaum, B.** (2016). Sequence-specific sensing of nucleic acids. *Trends in Immunology*, 38(1), 53-65. PMID: PMC5205569.
 - c. **Greenbaum, B D.**, Cocco, S., Levine, A.J., Monasson, R. (2014). Quantitative theory of entropic forces acting on constrained nucleotide sequences applied to viruses. *Proceedings of the National Academy of Sciences*, 111(13), 5054-5059. PMID: PMC3977288.
 - d. Desai, N, Sajed, D., Arora, K., S., Solovyov, A., Rajurkar, M. Jacob R. Bledsoe, J. R., Sil, S., Amri, R., Tai, E., MacKenzie, O.C., Mino-Kenudson, M., Aryee, M.J., Ferrone, C.R., Berger, D.L., Rivera, M.N., **Greenbaum, B.D.***, Vikram Deshpande, V.*, Ting, D.T.* (2016). Diverse repetitive element RNA expression define epigenetic and immunologic features of colon cancer. *JCI Insight*, 2(3): e91078. PMID: PMC5291727.
4. I made significant contributions to statistically quantifying viral genome evolution and diversity by using novel approaches from information theory and population genetics. My colleagues and I applied these methods to problems in viral reassortment, the transmission of viral diversity, amino acid distributions, and thermal protein adaptation.
 - a. **Greenbaum, B. D.**, Levine, A. J., Bhanot, G., Rabadan, R. (2008). Patterns of evolution and host gene mimicry in influenza and other RNA viruses. *PLoS Pathogens*, 4(6), e1000079. PMID: PMC2390760.
 - b. **Greenbaum, B. D.**, Li, O. T., Poon, L. L., Levine, A. J., Rabadan, R. (2012). Viral reassortment as an information exchange between viral segments. *Proceedings of the National Academy of Sciences*, 109(9), 3341-3346. PMID: PMC3295259.
 - c. Poon, L. L. M., Song, T., Rosenfeld, R., Lin, X., Rogers, M. B., Zhou, B., Sebra, R., Rebecca A. Halpin, R. A, Guan, Y., Twaddle, A., DePasse, J. V., Stockwell, T. B., Wentworth, D. E., Holmes, E. C., **Greenbaum, B.**, Peiris, J. S. M., Cowling, B. J., Ghedin, E. (2016). Quantifying influenza diversity and transmission in humans. *Nature Genetics*, 48(2), 195-200. PMID: PMC4731279.
 - d. Lehman, J., Libchaber, A., **Greenbaum, B.D.** (2016). Fundamental amino acid mass distributions and entropy costs in proteomes. *Journal of Theoretical Biology*, 410, 119-124.

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: TROYANSKAYA, OLGA

eRA COMMONS USER NAME (credential, e.g., agency login): troyanskaya

POSITION TITLE: Professor, Lewis-Sigler Institute for Integrative Genomics and Dept. of Computer Science

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
University of Richmond, Richmond, VA	BS	06/1999	Biology and Computer Science
Stanford University, Stanford, CA	PHD	06/2003	Biomedical Informatics

A. Personal Statement

My group's focus is development and implementation of robust computational methods and systems for analysis, integration, modeling and visualization of heterogeneous functional genomics data, tightly integrating these technologies with biological experiments and clinical information, and using them to study processes underlying human disease, drug action, and functional evolution, including in the context of specific tissues and cell lineages. We develop methods that lead to discovery of novel biology; the integrative data analysis approaches we have developed have demonstrated accuracy through competitions and systematic computational and experimental evaluations. This proposal will build on our prior work developing computational approaches to predict cell-lineage-specific gene expression and cell-lineage/tissue-specific networks, even in the absence of directly relevant data, such as for rarely assayed human tissues or cell lineages that are challenging to assay experimentally in human (e.g. the kidney podocytes), and using these networks for prediction of disease- and drug- associated signals and functional mapping across organisms. We will also leverage our successful work integrating functional genomic data with quantitative genetics information to identify disease- and trait-associated genes and our development of approaches for study cell-lineage specific expression and function. This proposal will also build on our experience in development of successful, accurate, and publicly used systems, most specifically the GIANT framework for prediction of tissue-specific networks and the NetWAS approach for integrating functional genomics and GWAS studies. This proposal will also leverage my and my group's background in functional genomics, modeling, data analysis, and machine learning, and our experience of successful and productive collaborations with experimental and clinical groups; see the following publications for examples:

1. Krishnan A, Zhang R, Yao V, Theesfeld CL, Wong AK, Tadych A, Volfovsky N, Packer A, Lash A, Troyanskaya OG. Genome-wide prediction and functional characterization of the genetic basis of autism spectrum disorder. *Nat Neurosci*. 2016 Nov;19(11):1454-1462. PubMed Central PMCID: PMC5803797.
2. Zhou J, Troyanskaya OG. Predicting effects of noncoding variants with deep learning-based sequence model. *Nat Methods*. 2015 Oct;12(10):931-4. PubMed Central PMCID: PMC4768299.
3. Greene CS, Krishnan A, Wong AK, Ricciotti E, Zelaya RA, Himmelstein DS, Zhang R, Hartmann BM, Zaslavsky E, Sealfon SC, Chasman DI, FitzGerald GA, Dolinski K, Grosser T, Troyanskaya OG. Understanding multicellular function and disease with human tissue-specific networks. *Nat Genet*. 2015 Jun;47(6):569-76. PubMed Central PMCID: PMC4828725.
4. Ju W, Greene CS, Eichinger F, Nair V, Hodgkin JB, Bitzer M, Lee YS, Zhu Q, Kehata M, Li M, Jiang S, Rastaldi MP, Cohen CD, Troyanskaya OG, Kretzler M. Defining cell-type specificity at the transcriptional level in human disease. *Genome Res*. 2013 Nov;23(11):1862-73. PubMed Central PMCID: PMC3814886.

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

2014 -	Deputy Director of Genomics, Simons Center for Data Analysis, Simons Foundation, NYC
2013 -	Professor, Lewis-Sigler Institute for Integrative Genomics and Dept. of Computer Science, Princeton University
2009 - 2013	Associate Professor, Lewis-Sigler Institute for Integrative Genomics and Dept. of Computer Science, Princeton University
2003 - 2009	Assistant Professor, Lewis-Sigler Institute for Integrative Genomics and Dept. of Computer Science, Princeton University
2002 - 2002	Instructor, Advanced Bioinformatics, California State University, Hayward, CA
1999 - 2003	Doctoral Student, Biomedical Informatics and Genetics, Stanford University, CA
1999 - 1999	Summer Research Fellow, Genome Diversity Center, University of Haifa, Israel
1998 - 1998	Summer Fellow, The Institute for Genomic Research, MD

Honors

2005 - 2007	Sloan Fellowship, Sloan Foundation
1999 - 2003	Predocutorial Fellowship, Howard Hughes Medical Institute
1999 - 2002	Stanford Graduate Fellowship, Stanford University
2014	Ira Herskowitz Award, The Genetics Society of America
2011	Blavatnik Award, Finalist, NYAS
2011	Overton Prize, International Society for Computational Biology
2009	Fellow, Canadian Institute for Advanced Research
2006	NSF Career Award, National Science Foundation
2006	Howard Wentz Faculty Award, Princeton University
2004	TR35 Innovators Award, MIT Technology Review
1999	Member, Director (2006-2016), International Society for Computational Biology
1998	Member, Phi Beta Kappa

C. Contribution to Science

1. The goal of my research is to bring the capabilities of computer science and statistics to the study of gene function and regulation in the biological networks and pathways through integrated analysis of biological data from diverse data sources--both existing and yet to come. My group has designed systematic, accurate computational and statistical algorithms for biological signal detection in high-throughput data sets to uncover hidden information within these data to enable novel biological insights about human health and disease.

Integration of heterogeneous genomics data to predict gene function: As a graduate student in the Altman and Botstein labs, I published the first study that applied a Bayesian approach to combine disparate data to make predictions of gene function for uncharacterized genes in yeast:

- a. Troyanskaya OG, Dolinski K, Owen AB, Altman RB, Botstein D. A Bayesian framework for combining heterogeneous data sources for gene function prediction (in *Saccharomyces cerevisiae*). *Proc Natl Acad Sci U S A*. 2003 Jul 8;100(14):8348-53. PubMed Central PMCID: PMC166232.
2. Gene function and network comparisons across species: My lab has developed algorithms that go beyond sequence similarity methods to leverage genomics data for the accurate determination of functionally equivalent genes across species and to compare networks across organisms. This work created the foundation for mapping information across species in a data-driven manner. For the most recent example, see:

- a. Wong AK, Krishnan A, Yao V, Tadych A, Troyanskaya OG. IMP 2.0: a multi-species functional genomics portal for integration, visualization and prediction of protein functions and networks. *Nucleic Acids Res.* 2015 Jul 1;43(W1):W128-33. PubMed Central PMCID: PMC4489318.
3. How networks function and change in a tissue-specific manner: we developed a computational method that generated functional molecular maps specific to 144 different human tissues to enable the better understanding of the functions and complex interrelationships of genes and proteins in specific cellular contexts, see:
 - a. Greene CS, Krishnan A, Wong AK, Ricciotti E, Zelaya RA, Himmelstein DS, Zhang R, Hartmann BM, Zaslavsky E, Sealfon SC, Chasman DI, FitzGerald GA, Dolinski K, Grosser T, Troyanskaya OG. Understanding multicellular function and disease with human tissue-specific networks. *Nat Genet.* 2015 Jun;47(6):569-76. PubMed Central PMCID: PMC4828725.
4. Computationally defining cell-type specificity in human disease: my group developed a novel technique to computationally determine cell lineage-specific gene expression based on expression compendia. In collaboration with the Kretzler lab, we created a proof-of-concept system that virtually dissects a kidney using expression data to separate cells that cannot be separated by physical dissection. We were then able to identify genes that are turned on in very specific kidney cell types, which is key information necessary for the molecular characterization of kidney disease that was up to now not tractable.
 - a. Ju W, Greene CS, Eichinger F, Nair V, Hodgkin JB, Bitzer M, Lee YS, Zhu Q, Kehata M, Li M, Jiang S, Rastaldi MP, Cohen CD, Troyanskaya OG, Kretzler M. Defining cell-type specificity at the transcriptional level in human disease. *Genome Res.* 2013 Nov;23(11):1862-73. PubMed Central PMCID: PMC3814886.
5. Development of research resources: in addition to the development of computational algorithms as described above, I take the additional step to turn them into research resources by making them accessible to the biomedical research at large. My group has released over 20 research resources, comprising of web sites, code libraries, and other software tools to allow biologists to explore and visualize our results, or implement our code, in a wide variety of ways.

Complete List of Published Work in My Bibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/olga.troyanskaya.1/bibliography/public/>

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Benjamin J. Raphael

eRA COMMONS USER NAME (credential, e.g., agency login): braphael

POSITION TITLE: Professor of Computer Science

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Massachusetts Institute of Technology	B.S.	1996	Mathematics
University of California, San Diego	Ph.D.	2002	Mathematics
University of California, San Diego	Postdoctoral	2006	Computer Science (Bioinformatics)

A. Personal Statement

I have the expertise, training, leadership and motivation necessary to successfully carry out the proposed research project. I have a broad background in computational biology, and specific training and expertise in computer science, mathematics, and biology. My research group focuses on the development and application of novel algorithms for cancer genomics, and my group has published extensively on pathway/network analysis of germline and somatic variants; single-cell DNA/RNA sequencing; tumor heterogeneity and evolution; and structural variation analysis. I currently lead a Genome Data Analysis Center (GDAC) from the NCI and I was part of multiple analysis working groups within The Cancer Genome Atlas (TCGA) and International Cancer Genome Consortium (ICGC). The results of our analyzes appear in dozens of publications from these consortia. I co-led the TCGA Pancreatic Adenocarcinoma project and the Networks and Pathways analysis for the ICGC Pan-Cancer Analysis of Whole Genomes (PCAWG) project. I have graduated 7 Ph.D. students, mentored 9 completed postdoctoral fellows, and currently advise 4 Ph.D. students and 3 postdoctoral fellows. Specific to the proposed project, I have an extensive publication record on network analysis, mutual exclusivity analysis, single-cell DNA/RNA sequencing and tumor evolution.

- a. M. Leiserson F. Vandin, ...(16 additional authors)..., **B.J. Raphael**. (2015) Pan-Cancer Network Analysis Identifies Combinations of Rare Somatic Mutations across Pathways and Protein Complexes. *Nature Genetics*. 47(2):106-114. PMID: PMC4444046.
- b. The Cancer Genome Atlas Research Network [**B.J. Raphael** Lead Corresponding Author]. (2017) Integrated Genomic Characterization of Pancreatic Ductal Adenocarcinoma. *Cancer Cell*. 32(2): 185–203.e13. PMID: PMC5964983.
- c. R. Elyanow, B. Dumitrascu, B.E. Engelhardt, **B.J. Raphael** (2020) netNMF-sc: Leveraging gene-gene interactions for imputation and dimensionality reduction in single-cell expression analysis. *Genome Research* 30(2):195-204. PMID: In process.
- d. Reyna MA, Haan D, Paczkowska M, Verbeke LPC, Vazquez M, Kahraman A, Pulido-Tamayo S, Barenboim J, Wadi L, Dhingra P, Shrestha R, Getz G, Lawrence MS, Pedersen JS, Rubin MA, Wheeler DA, Brunak S, Izarzugaza JMG, Khurana E, Marchal K, von Mering C, Sahinalp SC, Valencia A; PCAWG Drivers and Functional Interpretation Working Group, Reimand J, Stuart JM, **Raphael BJ**; PCAWG Consortium (2020) Pathway and network analysis of more than 2500 whole cancer genomes. *Nature Communications*. 11(1):729. PMID: PMC7002574

B. Positions and Honors

Positions and Employment

2006-2011	Assistant Professor, Department of Computer Science & Center for Computational Molecular Biology, Brown University
2011-2016	Associate Professor, Department of Computer Science & Center for Computational Molecular Biology, Brown University
2013-2016	Director, Center for Computational and Molecular Biology, Brown University
2016-	Professor, Department of Computer Science, Princeton University
2017-	Member, Rutgers Cancer Institute of New Jersey
2018-	Affiliate Member, New York Genome Center

Other Experience and Professional Memberships

1996-2002	Member, American Mathematical Society
2002-	Member, International Society for Computational Biology
2009-	Member, The Cancer Genome Atlas, Analysis Working Group
2010-2013	Leader, Structural Aberration Analysis Group, International Cancer Genome Consortium (ICGC)
2014-2017	Co-leader, TCGA Pancreatic Cancer Analysis Working Group
2014-2020	Co-leader, Networks and Pathways Analysis Group, ICGC
2018-	Member, Human Cell Atlas consortium

Honors

1999	U.S. Department of Education, GAANN Fellowship in Mathematics (declined)
2002-2004	Alfred P. Sloan Foundation / DOE Fellowship in Computational Biology
2005-2010	Burroughs Wellcome Career Award at the Scientific Interface
2006	Named one "Tomorrow's PI's" by Genome Technology magazine
2007	Brown Center for Computational Molecular Biology, CCMB Innovator Award
2010-2012	Sloan Research Fellowship, Molecular Biology
2011	National Science Foundation (NSF) CAREER Award
2020	AACR Team Science Award
2020	Elected Fellow, International Society of Computational Biology (ISCB)
2021	ISCB Innovator Award

Grant Review Panels

2007	NSF/NIGMS Mathematical Biology Study Section, member
2008, 2010, 2017	National Science Foundation
2008	National Institute of General Medical Science
2008	National Cancer Institute of Canada
2009-2010	Ministry of Education, Singapore
2011	National Cancer Institute Special Panel, ENCODE Panel
2012-2013	NIH Study Section Member (ad hoc). BDMA and GCAT.
2016	NIH Study Section Member (ad hoc). MABS.
2018	National Science Foundation

C. Contributions to Science

1. Network analysis of genetic variants. There are numerous methods for testing whether pre-defined gene sets (pathways) are enriched for DNA sequence variants. However, such methods do not allow one to identify novel pathways or interactions/crosstalk between pathways. Through our involvement in The Cancer Genome Atlas (TCGA), we realized that the availability of sequencing datasets from many samples allowed the possibility of *discovering* novel gene sets by identifying subnetworks of a genome-scale interaction network that are enriched for genetic variants across multiple samples. Finding such subnetworks is a challenging problem because significant subnetworks are determined by *both* the frequency (or association score) of variants within genes in the subnetwork and the local topology of the subnetwork. We developed the *HotNet* algorithm (Vandin et al. 2012) to address this problem. We further improved our approach for network analysis of variants, introducing *HotNet2* algorithm (Leiserson et al. 2015) and recently the Hierarchical-HotNet algorithm (Reyna et

a. 2018). The *HotNet/HotNet2* algorithms have been used in multiple publications from TCGA. We used *HotNet2* to perform a Pan-Cancer study of >3000 samples from 12 TCGA cancer types, identifying a number of novel genes and subnetworks that are mutated across cancer types, but with rare mutations that were distinguishable from noise when considered individually.

- a. F. Vandin, E. Upfal, **B.J. Raphael**. (2011) Algorithms for detecting significantly mutated pathways in cancer. *Journal of Computational Biology*. 18(3):507-22 [Journal version of paper accepted at *Proceedings of the 14th Annual International Conference on Research in Computational Molecular Biology (RECOMB 2010)*]. PMID: In process
- b. M. Leiserson F. Vandin, ... (16 additional authors)..., **B.J. Raphael**. (2015) Pan-Cancer Network Analysis Identifies Combinations of Rare Somatic Mutations across Pathways and Protein Complexes. *Nature Genetics*. 47(2):106-114. PMID: PMC4444046.
- c. M.R. Reyna, M.D.M. Leiserson, **B.J. Raphael**. (2018) Hierarchical HotNet: identifying hierarchies of altered subnetworks. *Bioinformatics [ECCB 2018 Proceedings]* 34(17): i972-i980. PMID: PMC6129270
- d. Reyna MA, Haan D, Paczkowska M, Verbeke LPC, Vazquez M, Kahraman A, Pulido-Tamayo S, Barenboim J, Wadi L, Dhingra P, Shrestha R, Getz G, Lawrence MS, Pedersen JS, Rubin MA, Wheeler DA, Brunak S, Izarzugaza JMG, Khurana E, Marchal K, von Mering C, Sahinalp SC, Valencia A; PCAWG Drivers and Functional Interpretation Working Group, Reimand J, Stuart JM, **Raphael BJ**; PCAWG Consortium (2020) Pathway and network analysis of more than 2500 whole cancer genomes. *Nature Communications*. 11(1):729. PMID: PMC7002574

2. Single-cell DNA and RNA sequencing. Single-cell DNA/RNA sequencing data has high rates of errors and missing data that complicate its analysis. We have developed algorithms to address these complications by combining information across individual cells and/or neighboring genomic loci. For single-cell DNA sequencing data, we developed CHISEL, the first method to identify allele-specific copy number aberrations in low-coverage single-cell sequencing data (Zaccaria and Raphael 2018), and designed SCARLET, an algorithm to infer phylogenetic trees from targeted single-cell DNA sequencing data using both single-nucleotide variants and copy number aberrations (Satas et al. 2020). We have also used prior knowledge of gene coexpression to aid in dimensionality reduction and imputation in single-cell RNA sequencing (Elyanow et al. 2020) and spatial information from spatial transcriptomics to identify copy number aberrations (Elyanow et al. 2020).

- a. S. Zaccaria and **B.J. Raphael**. (2020) Characterizing the allele- and haplotype-specific copy number landscape of cancer genomes at single-cell resolution with CHISEL. *Nature Biotechnology* Sep 2. doi: 10.1038/s41587-020-0661-6. PMID: In process.
- b. G. Satas, S. Zaccaria, G. Mon, and **B.J. Raphael**. (2020) SCARLET: Single-Cell Tumor Phylogeny Inference with Copy-Number Constrained Mutation Losses. *Cell Systems* 10 (4), 323-332. e8. PMID: In process.
- c. R. Elyanow, B. Dumitrescu, B.E. Engelhardt, **B.J. Raphael** (2020) netNMF-sc: Leveraging gene-gene interactions for imputation and dimensionality reduction in single-cell expression analysis. *Genome Research* 30(2):195-204. PMID: In process.
- d. R. Elyanow, R. Zeira, M. Land, **B.J. Raphael** (2020) STARCH: Copy number and clone inference from spatial transcriptomics data. Oct 6. doi: 10.1088/1478-3975/abbe99. PMID: In process.

3. Combinations of variants through mutual exclusivity. Early cancer sequencing studies demonstrated that in many cases somatic mutation of a *single* gene in a pathway (e.g. a pathway controlling cell growth) is sufficient to perturb this pathway. This implies that when examining somatic mutations from many patients, mutations in the same pathway will exhibit a pattern of *mutual exclusivity*. Mutual exclusivity between mutations in pairs of genes has been widely reported, but we were the first to systematically predict pathways by identifying *sets* of genes that exhibit mutual exclusivity; i.e. we *do not use any prior knowledge of interactions* between genes. Our algorithms have had a positive impact in cancer genomics and were used in TCGA study of acute myeloid leukemia and TCGA Pan-Cancer project.

- a. F. Vandin, E. Upfal, **B.J. Raphael**. (2012) *De novo* Discovery of Mutated Driver Pathways in Cancer. *Genome Research* 22(2):375-85. [Preliminary version appeared in *Proceedings of the 15th Annual International Conference on Research in Computational Molecular Biology (RECOMB 2011)*]. PMID: PMC3266044.

- b. M.D.M. Leiserson, H-T. Wu, F. Vandin, **B.J. Raphael** (2015). Comet: A Statistical Approach to Identify Combinations of Mutually Exclusive Alterations in Cancer. *Genome Biology*, 8;16:160. PMID: PMC4531541.
- c. M.D.M. Leiserson, M.A.Reyna, **B.J. Raphael** (2016) A Weighted Exact Test for Mutually Exclusive Mutations in Cancer. *Bioinformatics*, 32(17):i736-i745. PMID: PMC5013919
- d. T.Y.Park, M.D.M. Leiserson, G.W. Klau, **B.J. Raphael** (2020). Integrating genetic dependencies and genomic alterations across pathways and cancer types. *bioRxiv* 2020.07.13.184697 [Preprint], July 2020. Available from: <https://doi.org/10.1101/2020.07.13.184697>

4. Tumor heterogeneity and evolution. The cells in a tumor typically differ in their complement of somatic mutations, reflecting the ancestral relationships between cells. This intra-tumor heterogeneity complicates cancer genome studies, particularly because the vast majority of cancer sequencing data is from a single sample from a tumor, containing thousands-millions of cells. However, careful analysis of intra-tumor heterogeneity can also reveal information about the evolutionary history of the tumor. High-coverage cancer genome sequencing provides an unprecedented opportunity to quantify this heterogeneity and improve our understanding of the underlying mutational process. We have developed several algorithms to identify tumor clones and to reconstruct the phylogenetic tree that relates these clones from bulk sequencing data of multiple tumors. These algorithms are based on a rigorous mathematical formulation of the problem as a matrix factorization problem with explicit evolutionary constraints (El-Kebir et al 2015). We have extended this approach to model additional mutation types (El-Kebir et al. 2016; Satas et al. 2017) and to infer patterns of metastatic spread (El-Kebir et al. 2018).

- a. M. El-Kebir*, L. Oesper*, H. Acheson-Field, **B.J. Raphael**. (2015) Reconstruction of clonal trees and tumor composition from multi-sample cancer sequencing data. *Bioinformatics [Proceedings of ISMB 2015]*. 31(12):i62-70. PMID: PMC4542783.
- b. M. El-Kebir M, G. Satas G, L. Oesper L, **B.J. Raphael**. (2016) Inferring the Mutational History of a Tumor Using Multi-state Perfect Phylogeny Mixtures. *Cell Systems*. 3(1):43-53. PMID: in progress (PMID: 27467246).
- c. Satas G, **Raphael B.J.** (2017) Tumor phylogeny inference using tree-constrained importance sampling. *Bioinformatics [Proceedings of ISMB]* 15;33(14):i152-i160. PMID: PMC5870673.
- d. M. El-Kebir, G. Satas, **B.J. Raphael**. (2018) Inferring parsimonious migration histories for metastatic cancers. *Nature Genetics* 50(5):718-726. PMID: PMC6103651.

5. Copy number aberrations and structural variation. Copy number aberrations (CNAs) are common somatic mutations cancer, particularly in solid tumors, but are often challenging to detect in short-read DNA sequencing data of bulk tumors. We have developed several approaches to detect CNAs, identify tumor clones distinguished by these aberrations, and infer the proportions of distinct tumor clones and normal admixture in a bulk tumor sample. Our THetA algorithm (Oesper et al. 2013) was one of the *first* approaches for the later problem and has become one of the standard approaches in the field. We developed the first algorithms for high-resolution reconstruction of cancer genome organization from paired-end sequencing data (Raphael et al. 2003). We also recently developed HATCHet (Zaccaria and Raphael 2020) to infer allele-specific copy number aberrations simultaneously across multiple bulk tumor samples and RCK (Aganezov and Raphael 2020) to reconstruct allele-specific genome graphs from bulk tumor samples.

- a. S. Sindi, E. Helman, A. Bashir, **B.J. Raphael** (2009). A Geometric Approach for Classification and Comparison of Structural Variants. *Bioinformatics* 25: i222-i230. [*Proceedings of the Joint 17th Annual International Conference on Intelligent Systems in Molecular Biology and 8th Annual International European Conference on Computational Biology (ISMB/ECCB 09)*]. PMID: PMC2687962.
- b. L. Oesper, A. Mahmoody, **B.J. Raphael**. (2013) THetA: Inferring intra-tumor heterogeneity from high-throughput DNA sequencing data. *Genome Biology* 14:R80. PMID: PMC4054893.
- c. S. Aganezov and B.J Raphael. (2020) Reconstruction of clone-and haplotype-specific cancer genome karyotypes from bulk tumor samples. *Genome Research* Sep;30(9):1274-1290. PMID: In process.
- d. S. Zaccaria, **B.J. Raphael**. (2020) Accurate quantification of copy-number aberrations and whole-genome duplications in multi-sample tumor sequencing data. *Nature Communications* Sep 2;11(1):4301. PMID: PMC7468132.

D. Additional Information: Research Support and/or Scholastic Performance

Ongoing Research Support

NIH/NCI U24 CA248453-01A1 (Raphael) 9/24/2020-8/31/2025

Comprehensive and Robust Tools for Analysis of Tumor Heterogeneity and Evolution

The goal of this project is to develop a comprehensive software toolkit to analyze tumor heterogeneity and tumor evolution across space, time, and genomic scale. The software package will be open source and available to a wide range of users from expert bioinformaticians to clinicians.

Role: PI

NIH/NCI U24-CA211000-01 (Raphael) 9/15/2016-8/31/2021

Pathway and Network Integration of Cancer Genomics and Clinical Data

The goal of this project is to create a Genome Data Analysis Center (GDAC) to analyze data from cancer genome sequencing projects. The center will develop and apply novel computational approaches to identify biological pathways that are altered in cancer, suggesting new approaches for cancer diagnosis and treatment.

Role: PI

NIH/NCI U24-CA211006-01 (Ding) 9/14/2016-8/31/2021

Deep Discovery and Clinical Interpretation of the Germline and Somatic Cancer Drivers

The goal of this project is to extend computational approaches to detect and functionally and clinically interpret germline and somatic drivers using sequencing data from GCC along with curated clinical data.

Role: Co-Investigator

Completed Research Support [Recent]

NIH R01-HG007069 (Raphael) 9/1/2013-8/31/2019

Computational Characterization of Genetic Heterogeneity

The goal of this project is to develop and apply computational techniques to analyze genetic heterogeneity of diseases by identifying novel combinations of genetic variants/mutations that are correlated with a phenotype.

Role: PI

NSF CCF-1053753 (Raphael) 1/1/2011-12/31/2019

CAREER: Algorithms for Next-Generation Genomics

The goal of this project is to study new algorithmic problems in analysis of primary DNA sequencing data motivated by next-generation DNA sequencing technologies.

Role: PI

Chan Zuckerberg Initiative 4/1/2018-12/31/2019

Analysis of molecular and cellular interactions by combining network algorithms and human insight

The goal of this project is to develop a "human-in-the-loop" system for analysis of Human Cell Atlas data, combining network diffusion algorithms with human intelligence into a seamless workflow.

Role: PI



CPRIT Clinical Trials Advisory Committee: Fiscal Year 2021 Annual Report

**CPRIT Oversight Committee Meeting
August 18, 2021`**

C. Kent Osborne, Chair

DAN L DUNCAN
COMPREHENSIVE
CANCER CENTER



Clinical Trials Advisory Committee (CTAC)

Membership

- **C. Kent Osborne, MD**, Dan L Duncan Comprehensive Cancer Center, BCM
- **Ruben Mesa, MD**, Mays Cancer Center, UTHSCSA
- **Carlos Arteaga, MD**, Harold Simmons Comprehensive Cancer Center, UTSWMC
- **S. Gail Eckhardt, MD**, Livestrong Cancer Institute, DMC, UT Austin
- **David S. Hong, MD**, UTMDACC
- **C. Patrick Reynolds, MD, PhD**, Cancer Center, TTUHSC
- **Ray Tabibiazar, MD**, Aravive Biologics
- **Ronan Kelly, MD**, Baylor Scott and White, Sammons Cancer Center

CTAC Meetings

1. **March 31, 2020:**

- Reviewed the 2 RFAs on Early Clinical Investigator and the Clinical Trials Network Awards

2. **June 21, 2021:**

- Reviewed submission data on the RFAs
- Discussed issues related to the RFAs
- Discussed the Annual Report

Rational for RFAs

1. Precision cancer medicine: treatment for an individual patient is based on the specific gene mutations driving their tumor.
2. Thousands of different potentially targetable mutations.
3. Hundreds of new drugs in development.
4. More centers and clinical trial investigators needed.
5. Access to new drugs in clinical trials limited to major centers in urban areas; poor access for those in rural or underserved areas.

Principles Recommended by CTAC

1. Increase access to clinical trials for patients in outlying areas/underserved
2. Competitive RFA process
3. Early phase trials that can be completed quickly
4. Investigator initiated trials derived from work in a Texas lab
5. Efficiency and speed
6. Partner with industry
7. Provide personnel and infrastructure to smaller hospitals
8. Provide support and protected time for new clinicians to develop career in clinical investigation

RFAs

1. **Clinical Trials Network Award**

- Released Sept 2020 (5 submitted and pending)

2. **Early Clinical Investigator Award**

- Released Sept 2019 (8 submitted and 4 funded)
- Released Aug 2020 (11 submitted and pending)

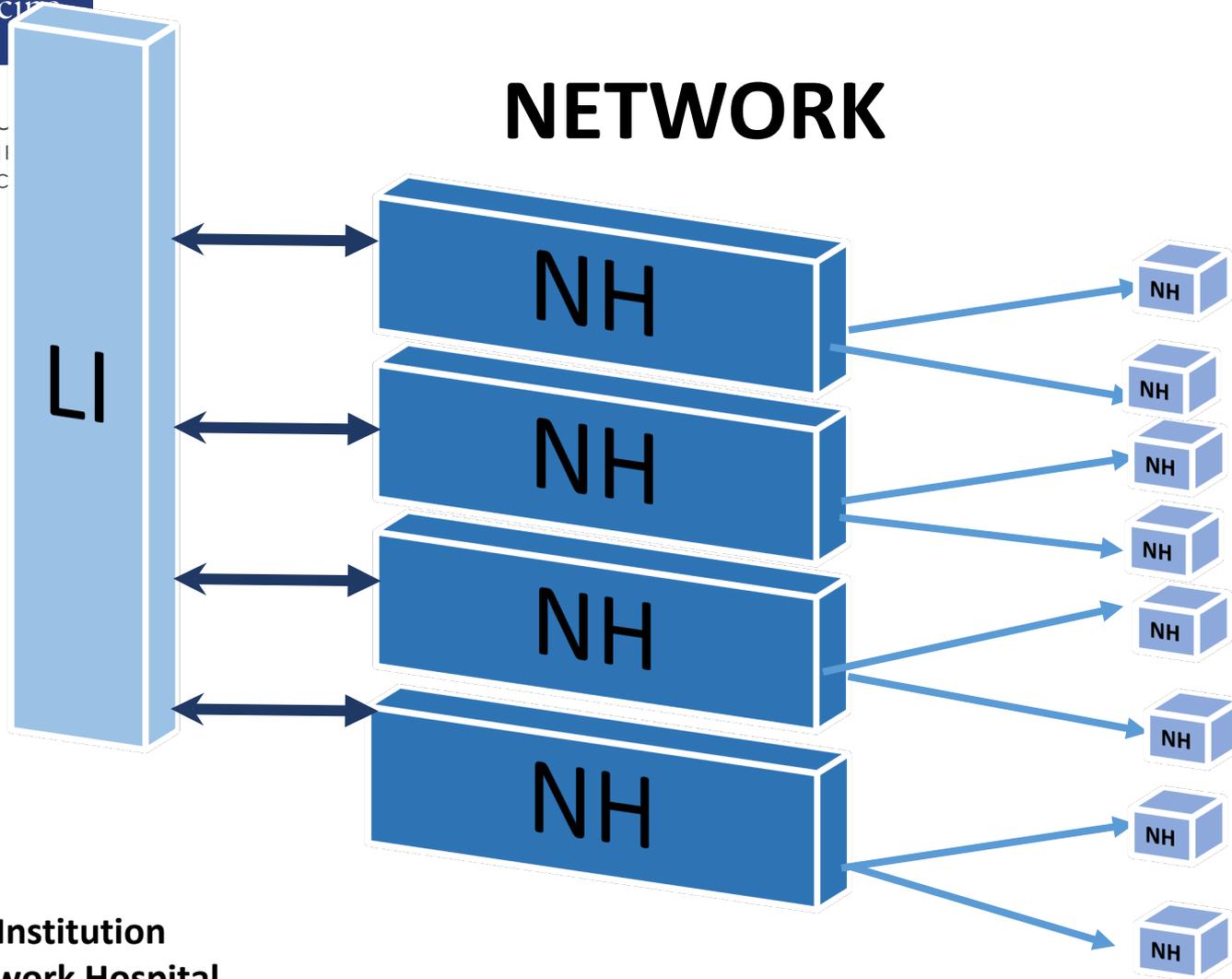
Proposal 1: Clinical Trials Network; Increase Access to Clinical Trials

1. Create clinical trial networks
2. Hub and spoke model with major research institution (LI) partnering with outlying and/or underserved hospitals (NH)
3. Provide resources to LI to administer and coordinate a network, and
4. Resources to NH to create functioning clinical trials infrastructure
5. Eventually merge into a Texas Clinical Trials Network?

Clinical Trials Network Model

Baylor
College of
Medicine

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Expanded Catchment Area

LI = Lead Institution
NH = Network Hospital

Metrics of Success

1. Number of patients screened; accrual from remote areas
2. Satisfactory performance on QA/QC and audits
3. Training and participation of NH with LI CTSU
4. Ability to enroll patients with molecularly defined subsets
5. Referral of patients for more sophisticated study/treatment to the LI

Issues/Concerns

1. 4 NCI cancer centers, none in West Texas (Houston, Dallas and San Antonio)
2. Geography in West Texas
3. Medical oncologists in practice face challenges that limit participation
4. Many nonhospital-based practices; where does the money go?
5. Competition among hospitals/oncologists in a given area (Texas Oncology or TOPA)
6. Too early to judge

Future Plan

1. Create state-wide Texas Clinical Trials Network (**TCTN**)
2. Link LIs and their networks together
3. Larger and more sophisticated trials
4. Trials of agents emanating from labs in Texas and industry
5. Administrative supplement

Proposal 2: Early Clinical Investigator Award: Increase Clinical Trial Physicians

1. Physicians interested in clinical investigation are declining
2. Interested oncologists don't have time
3. Hospitals are requiring doctors to see more and more patients (generate wRVUs)
4. Oncologists are attracted to private practice where they have higher salaries
5. New oncologists lack opportunity, interest and/or proper training for clinical research
6. Shortage will impair clinical trial and translational patient-oriented research

Proposal 2: Early Clinical Investigator; Increase Number of Investigators

1. Clinician in first 3 yrs after completing fellowship training
2. \$300K/yr x 5 yrs
3. 50% protected time with no clinical responsibilities
4. Funding for training, lab correlative studies, support for clinical trial
5. Maximum of 2 applications per institution

Issues/Concerns

1. New program too early to judge
2. Essential program to grow expertise
3. Focus on early clinical investigator not physician scientist
4. Amount of funding may be too high (\$1.5M for 5 yrs); consider more awards with less money per award
5. Load the award to give more first 2-3 yrs then less for 2-3 years
6. 50% protected time may be too much in the later years of the award.
7. Clinic is the laboratory of clinical investigators

Conclusions

1. CPRIT CTAC recommended 2 programs to augment clinical trial research and to expand access to cancer trials to more remote areas
2. Too early to determine success
3. Some changes to the RFAs should be considered in the future
4. Understanding the dynamics of cancer patient care and access to clinical trials is crucial for success



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: CAMERON ECKEL, ASSISTANT GENERAL COUNSEL
SUBJECT: APPOINTMENTS TO ADVISORY COMMITTEES
DATE: AUGUST 6, 2021

Summary and Recommendation

At its August 13 meeting, the Nominations subcommittee will discuss Presiding Officer Dee Margo's proposed appointments to the Advisory Committee on Childhood Cancers (ACCC) and Product Development Advisory Committee (PDAC) and vote on whether to recommend approval to the Oversight Committee.

Discussion

Texas Health and Safety Code Section 102.155 directs the Oversight Committee to create an ad hoc committee of experts to address childhood cancers and allows the Oversight Committee to create ad hoc committees of experts to advise the Oversight Committee. The ACCC advises the Oversight Committee on issues surrounding childhood cancer. The PDAC provides targeted advice to the Oversight Committee concerning the agency's product development program.

CPRIT's administrative rules dictate that the presiding officer of the Oversight Committee is responsible for appointing experts to serve on CPRIT's advisory committees. Appointments to the ACCC and PDAC must be approved by the Oversight Committee.

The Nominations subcommittee will consider the pending ACCC and PDAC nominations at its August 13 meeting.

Nominations for the Advisory Committee on Childhood Cancers (ACCC)

*Nominees	Role
Lisa Tichenor President and Trustee, QuadW Foundation	Advocate
Smita Bhaskara, M.D. Assistant Professor, Pediatric Hematology Oncology Medical Director - NWTH Pediatric Oncology Texas Tech University Health Sciences Center Amarillo	Geographic Member
Phillip Neff, M.D. Pediatric Hematology Oncology Dell Medical School at University of Texas at Austin	Geographic Member

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Lisa W. Tichenor

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: President and Trustee, QuadW Foundation

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Completion Date MM/YYYY	FIELD OF STUDY
University of Texas at Austin	BBA	05/1979	Finance

A. Personal Statement

My husband Mac and I lost our son, Willie, to osteosarcoma in 2006. Before he died, he asked us to seek new treatments for patients who ran out of options like he did. We formed the QuadW Foundation – **What Would Willie Want** – to take on that task.

B. Positions, Scientific Appointments, and Honors

2016 – present NCI MATCH Patient Advocate Working Group

2011-2017 Patient Advocate for the NCI Pediatric and Adolescent Solid Tumor Steering Committee

2010 External Advisory Board Member for Baylor CPRIT Multi-investigator grant on Osteosarcoma

C. Contributions to Science

The QuadW Foundation has funded more than 30 young investigators through ASCO, AACR, and fellowships at MD Anderson, Memorial Sloan Kettering, and Dana-Farber Cancer Institute.

In a grant developed within Children’s Oncology Group (COG), QuadW funded the upgrading and annotation of the COG osteosarcoma tissue bank. As a result of having an adequate number of annotated osteosarcoma tissue samples, osteosarcoma was included in the NCI TARGET project and the osteosarcoma genome was sequenced.

QuadW created and provided seed funding for the Osteosarcoma Institute.

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.
Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: SMITA BHASKARAN

eRA COMMONS USER NAME (credential, e.g., agency login): NA

POSITION TITLE: Assistant Professor, Medical Director Pediatric Hematology-Oncology

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Rainbow Babies & Children's Hospital, Case Western Reserve University, Cleveland OH	Fellowship	2011-2014	Pediatric Hematology/ Oncology
Metrohealth Medical Center, Case Western Reserve University, Cleveland OH	Residency	2008-2011	Pediatrics
World Health Organization(WHO) Project Institute of Palliative Medicine, Calicut India	Certificate	2005-2006	Palliative Medicine
Government Medical College, Kozhikode, Kerala, India	Internship	2004-2005	Pediatrics
Government Medical College, Kozhikode, Kerala, India	M.B.B.S	2004	Medicine/Surgery

A. Personal Statement:

My passion for understanding the complex molecular pathways that leads to carcinogenesis began in Fellowship where I researched a transcription factor called KLF4 in Leukemia. My research received recognition as one of top five researches at the American Society of Pediatric Hematology Oncology in 2015. I have been involved in several projects both clinical and basic science that focus on various malignancies, clinical outcomes, patient safety and cancer survivorship. I have devised several standard operating protocols that has tremendously impacted quality of care. All this has enhanced by clinical skills and I continue to provide unsurpassed care coupled with kindness and compassion to my patients. I have the expertise, leadership, training and motivation necessary to successfully carry out research projects. I am the responsible investigator for the Childrens Oncology Group at Texas Tech University Health Sciences Center in Amarillo. I strive for excellence in every endeavor as I work with dedication and perseverance. As the leader of a multidisciplinary team, I understand the value of teamwork and inspire my team to succeed.

B. Positions and Honors:

Positions and Employment

2021-Present Clerkship Director Pediatrics, Texas Tech University Health Sciences Center, Amarillo TX
2017-Present Medical Director, Pediatric Hematology Oncology, Northwest Texas Health
2015-Present Assistant Professor, Texas Tech University Health Sciences Center, Amarillo TX
2014-2015 Clinical Instructor, Pediatric Hematology Oncology, Rainbow Babies & Children's Hospital, Case Western Reserve University
2006-2006 Resident Medical Officer, Pediatrics, EMS Memorial Hospital and Research Center, Kerala, India
2005-2006 Senior House Officer, Institute of Palliative Medicine, Kerala, India
2004-2005 Compulsory Rotating Resident Internship, Government Medical College, Calicut, Kerala, India

Other Experience and Professional Memberships

Certifications: American Board of Pediatrics
American Board of Pediatric Hematology Oncology
Basic Certificate Course in Palliative Medicine – World Health Organization

Organizations: American Society of Pediatric Hematology Oncology, 2011-Present
Children's Oncology Group (COG), Member in training, 2011- Present

Honors and Awards:

1. Regional Dean's Service Award, Texas Tech University Health Sciences Center, Amarillo, 2017
2. Early Career Travel Award, 28th Annual American Society of Pediatric Hematology Oncology, 2015

3. Good Fellow Award, Metrohealth Medical Center, Case Western Reserve University, 2011
4. Bruce Davis Gold Medal in Palliative Medicine, Institute of Palliative Medicine, Calicut, Kerala, India, 2006
5. Train the Trainer Award, National Rural Health Mission in Palliative Medicine Volunteer Training, 2005-2006

C. Contributions to Science:

1. Bashtawi, R., Ramdhan, R., Zaid-Kaylani, S., **Bhaskaran, S.** An unusual case of treatment resistant lymphadenopathy in a Pediatric patient with Sickle Cell Disease : Kikuchi Fujimoto's Disease. *Pediatric Blood & Cancer*, doi.org/10.1002/psc.29060Volume 68, issue S3 S122, June 2021.
2. Narasimhan, M.L., Maniam, G., Ramdhan, R., Zaid-Kaylani, S., **Bhaskaran, S.** Complete remission of chronic resistant ITP following COVID-19 infection in a pediatric patient *Pediatric Blood & Cancer*, doi.org/10.1002/psc.29060Volume 68, issue S3 S117, June 2021.
3. Ramdhan, R., Narasimhan, M.L., **Bhaskaran, S.**, Zaid-Kaylani, S. A favorable response to targeted molecular therapy as an adjuvant in relapsed metastatic osteosarcoma: What have we achieved? *Pediatric Blood & Cancer*, doi.org/10.1002/psc.29060Volume 68, issue S3 S172, June 2021
4. Ramdhan, R., Maniam, G., Omer, L., **Bhaskaran, S.**, Zaid-Kaylani, S. Malaria and Hydroxyurea Treatment in Sickle Cell Disease: What do we know. *Pediatric Blood & Cancer*, doi.org/10.1002/psc.28321Volume 67, issue S2 S56, June 2020
5. Manian G, Zhu B, Dean R, Zaid-Kaylani S, **Bhaskaran S.** Pediatric Cancers in the Texas Panhandle: A single institution retrospective analysis. *Pediatric Blood & Cancer* doi.org/10.1002/psc.28321Volume 67, issue S2 S94, June 2020
6. Omer L, Maniam G, **Bhaskaran S**, Zaid-Kaylani S. Successful treatment of High risk neuroblastoma without autologous stem cell transplant. *Pediatric Blood & Cancer*, doi.org/10.1002/psc.28321Volume 67, issue S2 S140, June 2020
7. Narasimhan ML, Maniam G, Zaid-Kaylani S, **Bhaskaran S.** Hodgkin Lymphoma following acute lymphoblastic leukemia in a pediatric patient post therapy. *Pediatric Blood & Cancer*, doi.org/10.1002/psc.28321Volume 67, issue S2 S182, June 2020
8. Maniam G, Batson A, Omer L, **Bhaskaran S**, Zaid-Kaylani S. Ewing's sarcoma presenting as spontaneous hemothorax. *Pediatric Blood & Cancer*, doi.org/10.1002/psc.28321Volume 67, issue S2 S146, June 2020
9. Lekshminarayanan A, Bhatt P, Linga V, Chaudhary R, Zhu B, Dave M, Donda K, Savani S, Patel S, Billimoria **Bhaskaran S**, Kaylani SZ, Dapaah-Siakwan F, **Bhatt N.** National Trends in Hospitalization for Fever and Neutropenia in Children with Cancer, 2007-2014. *The Journal of Pediatrics*, 202: 231-237, November 2018. PubMed Central ID Number: 30029861
10. Olanrewaju A, **Bhaskaran S**, Kaylani SZ. Central Venous Line Migration Into The Pulmonary Trunk in a 4 Year old. *Consultant*, 58(10): 284-285, October 2018.
11. Stevenson K, Sessions W, Linga V, Bhatt P, **Bhaskaran S**, Nirgiotis J, **Meller J.** A rare case of Non Renal/ Non CNS malignant rhabdoid tumor originating from the omentum. Kayle Stevenson, Janet Meller, Smita Bhaskaran et al. *Journal of Pediatric surgery Case Reports*. *Journal of Pediatric Surgery Case Reports*, 36: 40-43, September 2018.
12. Bhatt N, Bhatt P, Donda K, Dapaah-Siakwan F, Chaudhary R, Linga V, Patel B, Lekshminarayanan A, **Bhaskaran S**, Kaylani SZ, Badawy S. Temporal trends of splenectomy in pediatric hospitalizations with immune thrombocytopenia. *Pediatr Blood Cancer*, 65(7): 8, July 2018. PubMed Central ID Number: 29637697
13. Bhatt N, Bhatt P, Donda K, Dapaah-Siakwan F, Batalahally S, Linga V, Lekshminarayan A, Chaudhari R, Kaylani S, **Bhaskaran S.** Trends of Splenectomy in Pediatric Patients with Immune Thrombocytopenia before and after the ASH 2011 Evidence-Based Practice Guidelines. *Blood*, vol. 130 no. Suppl 1 676:, December 7, 2017.
14. Ghawi H, Linga V, Bhatt P, Rodrigues B, Chandler B, **Bhaskaran S.** Factors influencing the Length of Stay in febrile pediatric Oncology patients. *Pediatric Blood & Cancer*, 64(S1): S71, June 2017.
15. Linga V, Bhatt P, Rodrigues B, Ghawi H, Turner C, **Bhaskaran S.** Hospital based initiative to minimize the time to antibiotic administration in febrile immunocompromised pediatric patients. *Pediatric Blood & Cancer*, 64(Supplement 1): S63, June 2017.
16. Lian S, Turner C, **Bhaskaran S.** Intrathecal Rituximab: A promising therapy for advanced stage B cell Lymphoma with CNS involvement. *Pediatric Blood & Cancer*, 64(S1):, June 2017.
17. **Bhaskaran S**, Ramakrishna A, Huang A, Matloub Y, Jain M, Letterio J. Role of KLF4 in T cell Leukemia. *Pediatric Blood & Cancer*, 62(S2): S22, June 2015.

18. **Bhaskaran S**, Abu-Arja R, Abusin G, Cabral L, Nagle K, Ahuja S, Egler R, Cooke KR, Lazarus HM. Recombinant human keratinocyte growth factor: successful treatment of severe, refractory hemorrhagic cystitis after allogeneic hematopoietic cell transplantation. *Bone Marrow Transplant*, 49(12): 1550-1, December 2014. PubMed Central ID Number: 25243621
19. **Bhaskaran S**, Hao X, Egler R, Sandhaus L. A unique case of Cutaneous LCH progressing to disseminated JXG. *Pediatric Blood & Cancer*, Vol 61(S1): S80, May 2014.

D. Additional Information: Research Support and/or Scholastic Performance :

Research Support

Research/Scholarly Activity

1. Vitamin D levels and COVID -19 infection in immunocompromised patients, 2021- Present
2. All Therapy and Associated CNS Toxicity, Principal Investigator, Texas Tech University Health Sciences Center, Amarillo TX, 2017-Present
3. Central Line Associated Blood Stream Infection, Principal Investigator, Texas Tech University Health Sciences Center, Amarillo TX, 2015-Present
4. Anthracycline Associated Cardiac Toxicity, Principal Investigator, Texas Tech University Health Science Center, Amarillo TX, 2017-Present
5. Newborn Care Among Refugee Populations/A Study of Influence of Cultural Background in West Texas, Co-Investigator, Texas Tech University Health Sciences Center, Amarillo TX, 2017-Present
6. Time to Antibiotic Administration in Febrile Oncology Patients, Principal Investigator, Texas Tech University Health Sciences Center, Amarillo TX, 2015-2016
7. Influenza Vaccination Status of Pediatric Oncology Patients, Co-Investigator, Texas Tech University Health Sciences Center, Amarillo TX, 2015-2016
8. Analyzing the Role of KLF4 as a Potential Tumor Suppressor in T-ALL, Mentor-John Letterio MD, Rainbow Babies and Children's Hospital, Case Western Reserve University, 2012-2015
9. Neutropenic Precautions for Immunocompromised Patients, Rainbow Babies and Children's Hospital, Case Western Reserve University, 2013-2014
10. Phlebotomy & Transfusion Practices in ELBW Infants in NICU, Mentor: Marc Collin MD, Metrohealth Medical Center, Case Western Research University, 2009-2011
11. Safe Resident Handoff Tool, Mentor: Swati Patel, MD, Metrohealth Medical Center, Case Western Reserve University, 2010-2011
12. WHO Analgesic Ladder – How Much Do We Deviate, Mentor: Suresh Kumar MD, Institute of Palliative Medicine, WHO Collaboration Project in Kerala, India, 2005-2006

Grants

1. Vitamin D levels and COVID -19 infection in immunocompromised patients, 2021- 2022, Texas Tech University Health Sciences Center. Bhaskaran S (Co-Principal investigator), Vasyleva T (Principal Investigator), Zaid-Kaylani S (Co-investigator), Mithra Lakshmi-Narasimhan (Co-investigator) Total Amount: \$10,000
2. A Study of the Neurotoxicity associated with Acute Leukemia treatment and its correlation with neurocognitive outcome, 2018 - 2020, MTK Foundation. Bhatt, P. (Co-Investigator), Tran, T. (Co-Investigator), Olanrewaju, A. (Co-Investigator), Venugopal, S. (Co-Investigator), Bhaskaran S (Co-Principal Investigator), Srivenugopal, K. S. (Co-Principal Investigator), Linga, V. (Principal Investigator). Total Amount: \$10,000.
3. Role of KLF4 in T Cell Leukemia, 2015, American Society of Pediatric Hematology Oncology, Early Career Travel Award. Bhaskaran S (Principal Investigator). 100% effort, Total Amount: \$500.
4. Role of KLF4 in T Cell Leukemia., 2013 - 2014, Rainbow Babies and Children's Foundation - Fellowship Research Award Program Grant. Bhaskaran S (Principal Investigator). 100% effort, Total Amount: \$10,000.

Philip E. Neff, M.D.

Pediatric Hematology Oncology
Dell Medical School at University of Texas at Austin
1301 Barbara Jordan Boulevard, Suite 401
Austin, TX 78723
(512) 628-1900
pneff@seton.org

Education

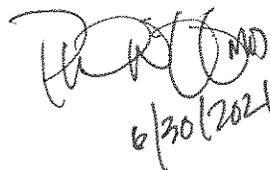
M.D., University of Missouri-Columbia, Columbia, MO /USA	08/1992- 05/1996
B.A., Psychology, University of Missouri-Columbia, Columbia, MO /USA	08/1987- 05/1992

Postdoctoral Training

American Board of Pediatrics – Pediatric Hematology-Oncology, Board Certification	11/2006- Present
American Board of Pediatrics – General Pediatrics, Board Certification	10/2000-Pres ent
Fellowship, Pediatric Hematology and Oncology, University of Missouri-Kansas City School of Medicine, The Children’s Mercy Hospital, Kansas City, MO	07/1999- 06/2002
Residency, General Pediatric Medicine, University of Missouri-Columbia School of Medicine Children’s Hospital and Clinics, Columbia, MO	07/1996- 06/1999

Academic and Leadership Appointments

Medical Director, Pediatric Hematology/Oncology	2017-present
Affiliated Faculty Pediatrics, Dell Medical School University of Texas at Austin, TX	2015-present
Volunteer Faculty Pediatrics, University of Texas Southwestern Pediatric Residency Program, Austin, Texas	2011-2015
Assistant Professor Department of Pediatric Hematology Oncology, East Carolina University, Pitt County Memorial Hospital, Greenville, NC	08/2002- 08/2006


6/30/2021

Other Relevant Employment and Clinical Activities

Physician, 'Specially for Children, Children's Blood and Cancer Center, Dell Children's Medical Center of Central Texas, Austin, Texas	09/2006- Present
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Professional Memberships and Activities with Leadership Positions

'Specially for Children Board President	2016-2017
'Specially for Children Board Secretary	2014-2017
Information Technology Committee, 'Specially for Children Co-Chair	2014-Present
Information Technology Committee, 'Specially for Children Member	2008-Present

Professional Memberships and Activities with Leadership Positions Continued

Travis County Medical Society Member	2006- Present
Palliative Care Committee, East Carolina University, Greenville, NC	2004-2006
Pediatric Hematology/Oncology Executive Committee, East Carolina University, Greenville, NC	2003-2006
Leo Jenkins Chemotherapy Committee, East Carolina University, Greenville, NC	2002-2006
Pediatric Resident Education Advisory Committee, East Carolina University, Greenville, NC	2002-2006
Pediatric Resident Advisor, East Carolina University, Greenville, NC	2004-2006
American Society of Pediatric Hematology/Oncology Member	2003- Present
Children's Oncology Group Associate Member	2002- Present
American Academy of Pediatrics Member	2000- Present

Educational Activities**Educational Administration and Leadership**

Member, Children's Blood and Cancer Center, Operations Council	2014-Present
Member, Seton Family of Hospitals Network Cancer Committee	2008

Teaching Activities

Facilitator/Guest Lecturer, Tumor Board. Weekly multidisciplinary conference (Pathology, Radiology, Surgery), presentation, diagnosis and treatment discussions of recent cases from the oncology service. Dell Children's Medical Center of Central Texas	2008-Present
Facilitator/Guest Lecturer, Resident Noon Conferences. Iron Deficiency Anemia; Transfusion Medicine; Hematology/Oncology Emergencies; Hematology/Oncology Pearls for Boards. East Carolina University, Greenville, NC	2002-2006
Quarterly Nursing Educational Sessions, Primary Speaker, Various topics related to the care of Pediatric Hematology/Oncology patients and families, East Carolina University, Greenville, NC	2002-2006

Clinical Teaching and Supervision

Facilitator/Guest Lecturer, Department of Pediatrics Grand Rounds, Continuing Medical Education	01/2003-08/2005
Guest Lecturer, Community Continuing Medical Education, Various topics presented to local and outlying hospital and clinic practitioners. East Carolina University, Greenville, NC	2002-2006

Grants**Completed**

Hyundai Hope Grant - Research Identification of novel metabolic biomarkers to predict response to therapy and design personalized therapy regimens in pediatric leukemia patients -collaboration with Dell Pediatric Research Institute/Dr. Tiziani Role: Principle Investigator	09/01/2013-12/01/2015
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Other Active Research Activities and Clinical and Quality Improvement Projects

Silent Infarct Transfusion Trial; Principle Investigator Multi-center trial to evaluate the efficacy of chronic transfusion in the prevention of new cardiovascular accidents and the progression of silent stroke. Washington University, St. Louis, MO. Michael Debaun,	09/2004-08/2006
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Publications**Peer-reviewed publications**

- Guy Young, MD, Brian Wicklund, MD, **Philip Neff, MD**, Chelsea Johnson, MD, and Diane J. Nugent, MD, Off-Label Use of rFVIIa in Children With Excessive Bleeding: A Consecutive Study of 153 Off-Label Uses in 139 Children. *Pediatric Blood Cancer* 2009
- Neff, P., Patterson-Kelly, K., Tobias, J.D. Septic Shock from the Administration of a Bacterially Contaminated Platelet Transfusion. *Southern Medical Journal* 92:1194-1198, 1999

Non-peer-reviewed publications

1. Extended Red Blood Cell Antigen Phenotype and Red Blood Cell Antigen-matched Transfusion Practices in Children with Sickle Cell Disease, Manuscript review and preparation.

Invited Presentations, Posters & Abstracts

International

Neff, P., Wicklund, B. Use of Recombinant Activated Factor VII (Novoseven) to Control or Prevent Bleeding in Children with Non-Hemophilia Associated Bleeding Disorders. International Society of Thrombosis and Hemophilia (ISTH)
- poster presentation 07/2001

National

Dextromethorphan Metabolism in Sickle Cell Disease Patients and Implications for Pain Management with Codeine. Abstract presentation National Sickle Cell Disease Program and Sickle Cell Disease Association of America 30th Annual Combined Meeting, 09/2002

Community Service

Medical Liaison & Board Member; Dream Factory of Eastern North Carolina 2006
Children's Miracle Network; Telethon Volunteer 2006

Nomination to Product Development Advisory Committee

- Jon Mogford, PhD



Jon Mogford, PhD

Jon Mogford, PhD, has led a range of science & technology organizations including a mission-focused federal sponsor of high-risk/high-reward programs, two early-stage, product-focused biotech startups, and academic research enterprises spanning every scientific discipline.

2005-2011

Dr. Mogford served as a Program Manager (2005-2009) and Deputy Director (2009-2011) of the Defense Sciences Office (DSO) at DARPA, the central R&D agency of the U.S. Department of Defense. DSO's thrust areas included biomedical & physical sciences, training and human effectiveness, biological warfare defense, materials, mathematics and biology. Dr. Mogford's DARPA programs included tissue regeneration, in silico protein design, controlled-release drug delivery, biomaterial control of non-compressible hemorrhage, and large-scale cell therapy manufacturing. As Deputy Director, he provided leadership to 20 Program Managers in development and management of investments ranging from the fundamental sciences to commercial transition for both defense and non-defense applications. Notably, he led an expansion of formal working relationship between DARPA, the NIH and the FDA that was highlighted as a model federal technology transition partnership by the White House.

2013-Present

From 2012-2021, Dr. Mogford served as Vice Chancellor for Research for the Texas A&M University System where he was the primary System intermediary to industrial, academic and federal research sponsors/partners in addition to providing R&D leadership to the System's eleven universities and eight state agencies encompassing 25,000 faculty and staff and research expenditures of ≈\$1 billion annually. In this role, he led establishment of System-wide Master Research Agreements with multiple partners such as IBM, Philips Healthcare, Kubota and 3M. Dr. Mogford transitioned in June 2021 to be Senior Vice President & COO of the Texas A&M Health Science Center, a comprehensive academic health center with 8 campuses, 40 clinical affiliates and 3200 professional students across programs in dentistry, medicine, nursing, pharmacy, and public health.

2018-Present

Starting in July 2018, Dr. Mogford served as initial CEO (9 months) and then Head Business Development & Alliances for SmartPharm Therapeutics, a privately funded early-stage biotech startup developing non-viral gene-encoded therapeutics for lipid storage disease and immune-oncology applications. SmartPharm was acquired by Sorrento Therapeutics (Aug 2020). During this same period, he co-founded and built the executive and management team for Safi BioSolutions as the cell therapy commercialization arm of the DoD's On-Demand Blood program. In this program, Safi is focused on large-scale blood cell manufacturing and engineered cell therapies to address both DoD and civilian clinical needs.

CURRICULUM VITAE 2021

Jon Mogford, PhD
jmogford@tamu.edu

PROFESSIONAL EXPERIENCE:

Senior Vice President & Chief Operating Officer June 2021-present
Texas A&M University Health Science Center

- Responsible for operational, educational/clinical and strategic activities across the University's Health Science Center enterprise
- College of Medicine College of Nursing College of Dentistry
College of Pharmacy School of Public Health
EnMed: Engineering+Medicine Intercollegiate School

Vice Chancellor for Research (formerly Chief Research Officer, Aug 2012-Apr 2013) May 2013-June 2021
Texas A&M University System

- Provided research and development leadership to the System's eleven universities and eight state agencies encompassing 25,000 faculty and staff and research expenditures of >\$1B annually
- Served as primary System intermediary to research sponsors and strategic partners from industry, academia and the federal government
- Responsible for research compliance activities to all System members

Co-Founder and Chair August 2019-present
Safi BioSolutions, Inc.

- DoD-funded early-stage company focused on engineered cell therapies and large-scale blood cell manufacturing

Chief Executive Officer/Head of Business Development and Alliances July 2018-Jun 2019
SmartPharm Therapeutics, Inc.

- Privately funded, early-stage startup developing gene-encoded therapeutics for cardiovascular disease and immune-oncology applications
- Acquired by Sorrento Therapeutics (August 2020)

Associate Vice Chancellor for Strategic Initiatives Nov 2011-Aug 2012
Texas A&M University System

- Developed strategic partnerships with external agencies, foundations, academic institutions, and commercial corporations to enhance the system's mission of research, teaching, service, and economic development

Deputy Director, Defense Sciences Office (DSO) Feb 2010-Oct 2011
Defense Advanced Research Projects Agency (DARPA), Arlington, VA

- Provided strategic planning and implementation of ≈\$370M/year in R&D in the physical, biomedical and material sciences
- Provided leadership to 20 Program Managers in the development and management of office investments ranging from the fundamental sciences to commercial transition efforts for both defense and non-defense applications
- Led expansion of formal working relationship between DARPA and the FDA to improve the ability of each organization to meet mission goals; highlighted as a DARPA-FDA-NIH partnership by the White House
- Recipient of the Secretary of Defense Medal for Outstanding Public Service

Program Manager, Defense Sciences Office (DSO) Jul 2005-Feb 2010
Defense Advanced Research Projects Agency, Arlington, VA

Initiated and/or Actively Managed ≈\$110M in Research & Development life sciences programs:

- Protein Design Processes – *Computational Design of Novel Proteins*
- Restorative Injury Repair – *Scar-free Regeneration of Wounds*
- Surviving Blood Loss – *Metabolic Control Strategies for Survival of Blood Loss*
- Feedback Regulated Automatic Molecular Release – *Need-Responsive Biomaterials for Drug Delivery*
- Blood Pharming – *Stem Cell-Based, Scalable Bioreactor Production of Human Universal Donor Red Blood Cells*
- Wound Stasis System – *Active Hemostatic Biomaterials for Internal and External Wounds*

Consultant

Dec 2003-Jun 2005

Strategic Analysis, Inc., Arlington, VA 22201

Provided Scientific and Programmatic Development Support for the following DARPA programs:

- Restorative Injury Repair – Scar-free Regeneration of Wounds
- Revolutionizing Prosthetics – Neurally Controlled, Fully Functional Upper Extremity Prosthesis

Postdoctoral Fellow/Research Associate/Research Asst. Professor
Northwestern University, Department of Surgery, Chicago, IL

Apr 1997-Nov 2003

EDUCATION:

Ph.D. Texas A&M University Health Science Center, College Station, TX
Major Field: Medical Sciences (Physiology). Degree conferred May 1997.
B.S. Texas A&M University, College Station, TX
Major Field: Zoology. Degree conferred December 1990.

PROFESSIONAL ACTIVITIES:

Committees

- Member, *National Academy of Sciences Committee Service*
 - Committee on Determining Core Capabilities in Chemical and Biological Defense Research and Development, Board on Chemical Sciences and Technology (BCST) and the Board on Life Sciences of the National Research Council (NRC), 2012
- Member, Advisory Group, Lone Star Unmanned Aerial Systems Center of Excellence and Innovation, since 2014
- Member, Army-DARPA Innovation Group, 2015-2017

Boards of Directors, Independent Member

PolarityTE (public), 2017-2020
Medovex (public), 2017-2018

Scientific Advisor

Rion (private; Mayo Clinic spinout), 2018-2019

Student Collaborations

- Engineering Design Capstone/Student Joint Venture Project, Texas A&M University, Obstructive Sleep Apnea Travel Device, Trey Bowen, Kyle Sullivan, Emily Veerkamp, Sean Brocklehurst (Faculty Mentor, Dr. Satish Bukkapatnam), Fall 2014-Spring 2015
- Engineering Design Capstone/Student Joint Venture Project, Texas A&M University, Retractable Aspiration Device. Max Cadena, Michelle Hatch, Yudi Lin, Jeanne Szumski, David Thomas (Faculty Mentor: Prof Michael McShane), Fall 2013-Spring 2014.
- ME-398 Engineering Design, Northwestern University, Advised and worked with mechanical engineering undergraduates in a capstone design project related to improving the design of a micro-pipetting system. Shad Laws, Lars Moravy, Yola Shum, Chris Tiesdler, Prof. Richard Lueptow. Winter Quarter, 2003.

PATENTS:

- US 10,926,136 "Health Monitoring with 3D Printed Sensors", Inventors: Jon Mogford, Ken Church, Assigned to Sciperio, Inc. (Awarded 2/21)

AWARDS:

- Proctor & Gamble Professional Research Award; American Physiological Society Cardiovascular Section; 1996.
- August Krogh Young Investigator Award, Microcirculatory Society, 1997.
- Evans-Gilruth Foundation Fellowship Awardee; "Integrin-Mediated Cell Signalling in Vascular Smooth Muscle";
- \$2,500 for 10/1/93-9/30/94.
- Significant Technological Breakthrough/Core Technology Thrust Area, DARPA, 2007

GRANTS:

1. NRSA Institutional Cardiovascular Training Grant Recipient, 1998-1999.
2. NIH R01 Co-Principle Investigator, "Impact of aging, ischemia and cytokines on wound healing." 7/1/99-6/30/03, \$872,170 (direct).
3. NIH R01 Microarray Supplement Co-Principle Investigator, 2/1/01-2/1/02, \$43,785 (direct).
4. NIH R01 Co-Principle Investigator, "Role of TGF- β in Excessive Scarring: A Cutaneous Model", 7/01/01-6/30/06, \$1,050,000 (direct).

PEER-REVIEWED PAPERS:

1. Mogford JE, Davis GE, Platts SH, Meininger GA. Vascular smooth muscle $\alpha_v\beta_3$ integrin mediates arteriolar vasodilation in response to RGD peptides. *Circ Res* 1996; 79(4): 821-826.
2. D'Angelo G, Mogford JE, Davis GE, Davis MJ, Meininger GA. Integrin mediated reduction in vascular smooth muscle $[Ca^{2+}]_i$. *Am J Physiol* 1997; 272: H2065-H2070.
3. Mogford JE, Davis GE, Meininger GA. Soluble RGD peptide interaction with endothelial $\alpha_5\beta_1$ integrin results in endothelin-mediated vasoconstriction of isolated rat skeletal muscle arterioles. *J Clin Invest.* 1997; 100 (6): 1647-1653.
4. Platts SH, Mogford JE, Davis MJ, Meininger GA. Role of K^+ channels in arteriolar vasodilation mediated by integrin interaction with RGD-containing peptide. *Am J Physiol* 1998; 275(4 Pt 2): H1449-54.
5. Wu X, Mogford JE, Platts SH, Davis GE, Meininger GA, Davis MJ. Modulation of calcium current in arteriolar smooth muscle by $\alpha_5\beta_1$ and $\alpha_v\beta_3$ integrin ligands. *J Cell Biol* 1998; 143(1): 241-52.
6. Tyrone J, Mogford JE, Chandler L, Aukerman L, Ma J, Xia Y, Pierce G, Mustoe TA. Collagen-embedded PDGF DNA plasmid promotes wound healing in a dermal ulcer model. *J Surg Res* 2000; 93 (2): 230-236.
7. Morla AO, Mogford JE. Control of smooth muscle cell proliferation and phenotype by integrin signaling. *Biomed Biophys Res Commun* 2000; 272:298-302.
8. Tyrone JW, Marcus JR, Bonomo SR, Mogford JE, Xia Y, Mustoe TA. Transforming growth factor beta3 promotes fascial wound healing in a new animal model. *Arch Surg* 2000; 135(10): 1154-9.
9. Mogford JE, Tawil N, Chen A, Gies D, Xia Y, Mustoe TA. Effect of age and hypoxia on TGFbeta1 receptor expression and signal transduction in human dermal fibroblasts: Impact on cell migration. *J Cell Physiol* 2001; 190(2): 259-65.
10. Kim I, Mogford JE, Chao JD, Mustoe TA. Wound epithelialization deficits in the transforming growth factor-alpha knockout mouse. *Wound Repair Regen* 2001; 9: 386-390.
11. Saulis AS, Chao JD, Telser A, Mogford JE, Mustoe TA. Silicone occlusive products in the treatment of hypertrophic scar in the rabbit hypertrophic scar model. *Aesthet Surg J* 2002; 22(2): 147-153.
12. Saulis AS, Mogford JE, Mustoe TA. The effect of mederma on hypertrophic scarring in the rabbit ear hypertrophic scar model. *Plast Reconstr Surg* 2002; 110(1): 177-183.
13. Mogford JE, Kim I, Witschi C, Nafissi M, Mustoe TA. Collagen prolyl 4-hydroxylase inhibitor reduces scar elevation in a rabbit ear model of hypertrophic scarring. *Wound Repair Regen* 2003; 11: 368-372.
14. Mogford JE, Roy NK, Cross KJ, Mustoe TA. Use of hypoxia-inducible factor signal transduction pathway to measure O_2 levels and modulate growth factor pathways. *Wound Repair Regen* 2003; 11(6): 496-503.
15. Reid RR, Sull AC, Mogford JE, Roy N, Mustoe TA. A novel murine model of cyclical cutaneous ischemia-reperfusion injury. *J Surg Res* 2004; 116(1): 172-180.
16. Mogford JE, Hijjawi J, Chandler LA, Cross KJ, Said H, Sosnowski BA, Mustoe TA. PDGF-B but not FGF2 plasmid DNA improves survival of ischemic myocutaneous flaps. *Arch Surg* 2004; 139(2): 142-147.
17. Mogford JE, Sisco M, Robinson AM, Bonomo SR, Zhao Y, Mustoe TA. Impact of aging on gene expression in a rat model of ischemic cutaneous wound healing. *J Surg Res* 2004; 118(2): 190-196.
18. Lee MJ, Roy NK, Mogford JE, Schiemann WP, Mustoe TA. Fibulin-5 (DANCE/EVEC) promotes wound healing *in vivo*. *J Am Coll Surg* 2004; 199(3): 403-410.
19. Reid RR, Said HK, Mogford JE, Mustoe TA. The future of wound healing: Pursuing surgical models in transgenic and knockout mice. *J Am Coll Surg* 2004; 199(4): 578-585.
20. Said HK, Hijjawi J, Roy N, Mogford J, Mustoe T. Transdermal sustained-delivery oxygen improves epithelial healing in a rabbit ear wound model. *Arch Surg* 2005; 140(10): 998-1004.
21. Gurjala AN, Liu WR, Mogford JE, Procaccini PS, Mustoe TA. Age-dependent response of primary human dermal fibroblasts to oxidative stress: cell survival, pro-survival kinases, and entrance into cellular senescence. *Wound Repair Regen* 2005; 13(6): 565-75.
22. Tandara AA, Kloeters O, Kim I, Mogford JE, Mustoe TA. Age Effect on HSP70: Decreased resistance to ischemic and oxidative stress in HDF. *J Surg Res* 2006; 132(1): 32-39.
23. Mogford JE, Reid RR, Butt R, deGiorgio-Miller A, Mustoe TA. Inhibition of procollagen C- proteinase reduces scar hypertrophy in a rabbit model of cutaneous scarring. *Wound Repair Regen* 2006; 14: 138-141.
24. Mogford JE, Liu WR, Reid RR, Said HK, Chen S, Chui C, Harley CB, Mustoe TA. Adenoviral hTERT dramatically improves ischemic wound healing without detrimental immune response in an aged rabbit model *Human Gene Therapy* 2006; 17(6): 651-660.
25. Reid RR, Roy N, Mogford JE, Zimmerman H, Lee C, Mustoe TA. Reduction of hypertrophic scar via retroviral delivery of a dominant negative TGF-beta receptor II. *J Plast Reconstr Aesthet Surg* 2007; 60(1): 64-72.
26. Tandara AA, Kloeters O, Mogford JE, Mustoe TA. Hydrated keratinocytes reduce collagen synthesis by fibroblasts via paracrine mechanisms. *Wound Repair Regen* 2007; 15(4): 497-504.
27. Sisco M, Chao JD, Kim I, Mogford JE, Mayadas TN, Mustoe TA. Delayed wound healing in Mac 1-deficient mice

is associated with normal monocyte recruitment. *Wound Repair Regen* 2007; 15(4): 566-571.

28. Mogford JE, Tawil B, Mustoe TA. Fibrin sealant combined with fibroblasts and PDGF enhance wound healing in excisional wounds. *Wound Repair Regen* 2009 May-Jun; 17(3):405-410.

CHAPTERS/REVIEWS:

Mogford JE, Mustoe TA. *Animal Models of Wound Healing*. In: Cutaneous Wound Healing, Falanga V., ed. Martin Dunitz Ltd, London, 2001.

Muneoka K, Lai E, Christy RJ, Mogford JE. Limb Regrowth and Tissue Engineering Alternatives. In: Full Stride: Advancing the State of the Art in Lower Extremity Gait Systems, Tepe V and Peterson CM eds. Springer Publishing, In Press.

ABSTRACTS & ORAL PRESENTATIONS:

1. Mogford JE, Davis GE, Meininger GA. Integrin expression by porcine coronary vascular smooth cells. APS Conference: Mechanotransduction and Regulation of Growth and Differentiation. *Physiologist* 37 (4): A3, 1994.
2. Mogford JE, Platts SH, Meininger GA. Synthetic RGD peptide causes dilation in rat skeletal muscle arterioles. *Microcirculation* 2(1): 66, 1995.
3. Mogford JE, Davis GE, Meininger GA. Integrin expression by porcine coronary vascular smooth muscle cells. *Microcirculation* 2(1): 90, 1995.
4. Mogford JE, Platts SH, Davis GE, Meininger GA. Integrin control of vascular smooth muscle tone. Cell Signaling and the Cytoskeleton, 11th Intl. Sym. on Cell Endocrinology, Sept. 1995.
5. Mogford JE, Platts SH, Davis GE, Meininger GA. The integrin $\alpha_v\beta_3$ expressed by vascular smooth muscle regulates arteriolar tone. Keystone Sym. on Molecular and Cell. Biol.: Integrins and Signaling Events in Cell Biology and Disease, Jan. 1996.
6. Mogford JE, Platts SH, Davis GE, Meininger GA. Vascular Smooth Muscle $\alpha_v\beta_3$ integrin mediates vasodilation in response to RGD peptides and collagen fragments. *FASEB J.* 10(3): 3514 MAR 8 1996.
7. Wu X., Mogford JE, Platts SH, Davis GE, Meininger GA, Davis MJ. Integrin-mediated dilation of arterioles in skeletal muscle may involve inhibition of L-type Ca^{2+} channels. *FASEB J.* 10(3): 311 MAR 8 1996.
8. Platts SH, Mogford JE, Davis MJ, Davis GE, Meininger GA. Role of ion channels in integrin-mediated vasodilation of rat skeletal muscle arterioles. Microcirculatory Society Meeting, April 1996.
9. Wu X., Meininger GA, Davis GE, Mogford JE, Platts SH, Davis MJ. Electrophysiological evidence for integrin modulation of calcium channels in rat arteriolar smooth muscle. Biophysical Society Annual Meeting, 1997.
10. Mogford JE, Davis GE, Meininger GA. RGDN peptide induces endothelin-dependent vasoconstriction through interaction with endothelial $\alpha_5\beta_1$ integrin. Vascular Biology '97. *Microcirculation* 4(1): 90, 1997.
11. Meininger GA, Mogford JE, Davis GE. Local regulation of the microcirculation by signals derived from the extracellular matrix. *Pflugers Archiv-European Journal Of Physiology* 433(6): PL1-PL1, Suppl. S 1997.
12. Modulation of Ca^{2+} current in arteriolar smooth muscle by $\alpha(v)\beta(3)$ and $\alpha(5)\beta(1)$ integrin ligands. Wu X, Mogford JE, Platts SH, Davis GE, Meininger GA, Davis MJ. *Molecular Biology Of The Cell* 9: 2431, Suppl. S1998.
13. Chao JD, Marcus JR, Mogford JE, Tyrone JW, Xia Y, Mustoe TA. Neutralization of TGF- β isoforms 1, 2, and 3 delays wound closure in full-thickness dermal ulcers. Plastic Surgery Research Council 1999, Pittsburgh, PA.
14. Mogford JE, Chen EA, Xia Y, Tawil N, Mustoe TA. Age-Related Migratory Impairment and Hypoxic Response in Human Dermal Fibroblasts. Gordon Research Conference: Wound Healing. June 1999.
15. Saulis AS, Davidson JD, Mustoe TA, Mogford JE. Hyperbaric oxygen modulates PDGF receptor β expression and erk1/2 activation in human dermal fibroblasts *in vitro*. Undersea and Hyperbaric Medical Society, Annual Scientific Meeting, June 2000, Stockholm, Sweden.
16. Xia A, Mogford JE, Witschi C, Nafissi M, Mustoe TA. Collagen prolyl 4-hydroxylase inhibitor reduces scar elevation in a rabbit ear model of hypertrophic scarring. American College of Surgeon's Surgical Forum, Oct. 2000, Chicago, IL.
17. Hijjawi J, Kim I, Mogford J, Chandler L, Ma J, Gu D, Pierce G, Mustoe TA. Platelet-Derived Growth Factor-B Chain DNA Plasmid Augments the Survival of Ischemic Myocutaneous Flaps: A Role for Gene Therapy in Plastic Surgery. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
18. Lee MJ, Mogford JE, Saulis AS, Mustoe TA. TGFbeta Receptor Type I Expression Varies with Degree of Scar Formation. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
19. Sisco M, Mogford JE, Robinson A, Zhao Y, Mustoe TA. Gene Array Analysis of the Impact of Aging and Ischemia on Wound Healing in Rats. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
20. Cole M, Cox S, Mogford J, Mana M, Ho W, Eggleston A, Mustoe TA, Tawil N. Fibrin Sealant Tisseel is a Biocompatible Polymer for Human-Derived Monocytes, Fibroblasts, and Keratinocytes. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
21. Sisco M, Chao J, Kim I, Mayadas-Norton T, Mogford JE, Mustoe TA. Delayed Wound Healing in Mac-1 (CD11b/CD18) Integrin Knockout Mice. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
22. Cox S, Mogford J, Yoder H, Mustoe T, Tawil N. Fibrin Sealant (Tisseel) is an Ideal Vehicle for Fibroblasts Delivery:

- In Vitro and In Vivo Studies. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
23. Saulis AS, Davidson JD, Mustoe TA, Mogford JE. Oxygen Growth Environment-Dependent Activation of Human Dermal Fibroblast p42-p44 MAPK by Hyperbaric Oxygen. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
 24. Mogford JE, Mustoe TA. PDGF-Stimulated Migration of Human Dermal Fibroblasts in 3-D Collagen Gels is Reduced with Age and Hypoxia. Wound Healing Society 2001 Annual Meeting, Albuquerque, NM.
 25. Reid RR, Mogford JE, Zhang M, Wakim B, Carroll MC, Mustoe TA. The Binding of Natural IgM to Hypoxic Endothelium: Implications in Ischemia-Reperfusion Injury. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 26. Said HK, Hijjawi J, Burk M, Mogford JE, Mustoe TA. Continuous Local Oxygen Delivery Accelerates Epithelial Healing in the Rabbit Ear Punch Wound Model. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 27. Cross KJ, Sisco M, Mogford JE, Mustoe TA. A Novel Ischemic Wound Healing Model In The Rat: Abipedicled Back Flap with Internal Controls. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 28. Mogford JE, Lee MJ, Mustoe TA. Hypoxic Impairment of KGF and TGF-beta1 expression by aged human dermal fibroblasts. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 29. Mogford JE, Cox S, Mustoe TA, Tawil N. Fibrin Sealant Tisseel as a Vehicle for Fibroblast Delivery: In Vivo Studies. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 30. Cross KJ, Davidson JD, Mustoe TA, Mogford JE. O₂ Activation of Gene Expression in Aged and Young Human Dermal Fibroblasts. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 31. Reid RR, Said HK, Mogford JE, Mustoe TA. A Systematic Approach to Phenotyping a Mouse Wound Healing. Wound Healing Society 2002 Annual Meeting, Baltimore, MD.
 32. Tandara AA, Procaccini PS, Mustoe TA, Mogford JE. Impact of Keratinocyte-Fibroblast Coculture on Collagen and Cytokine Expression. Wound Healing Society 2003 Annual Meeting, Seattle, WA.
 33. Gurjala A, Procaccini PS, Mustoe TA, Mogford JE. Impact of Aging on Oxidant Injury to Human Dermal Fibroblasts. Wound Healing Society 2003 Annual Meeting, Seattle, WA.
 34. Lu L, Rosenberg D, Mogford JE, Mustoe TA. Adenoviral hTERT Transfection Results in Altered Phospho-ERK Activity in Human Dermal Fibroblasts. Wound Healing Society 2004 Annual Meeting, Atlanta, GA.

LABORATORY SUPERVISION:

Residents, Northwestern University Medical School

Jerry D. Chao, MD (1998-1999)	John W. Tyrone, MD (1998-1999)
Kent V. Hasen, MD (1998-1999)	Alexandrina S. Saulis, MD (1999-2000)
Michael J. Lee, MD (2000-2001)	John Hijjawi, MD (2000-2001)
Russell Reid, MD, PhD (2001-2002)	Hakim Said, MD (2001-2002)
Leonard Lu, MD (2003)	David Rosenberg, MD (2003)

Fellows, Northwestern University Medical School

Yanan Zhao, MD (1998-2000), Surgical Fellow (Kunming Medical College, PR China)
 Injoong Kim, MD, PhD (1998-2000), Surgical Fellow (Catholic University, S. Korea)
 Mark Sisco, MD (2000-2001), Predoctoral Fellow (Northwestern University Medical School)
 Kevin Cross, MD (2001-2002), Predoctoral Fellow (University of Pennsylvania Medical School)
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Undergraduate Students, Texas A&M Health Sciences Center and Northwestern University Medical School

Jose R. Medina (1994-1997) Howard Hughes Medical Institute Undergraduate Research Intern
 Issac Meek (1994) Howard Hughes Medical Institute Undergraduate Research Intern
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 Allan Sull (2002) Dartmouth University



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: FY 2022 ADVISORY COMMITTEE ANNUAL REPORT SCHEDULE
DATE: AUGUST 11, 2021

Summary

Presiding Officer Dee Margo requested that I prepare a FY 2022 schedule for the annual reports that each advisory committee presents to the Oversight Committee. No official action is necessary; CPRIT will use the proposed schedule to prepare future Oversight Committee meeting agendas. The schedule is subject to change as dictated by future events.

Proposed Schedule

Advisory Committee Annual Report Schedule – FY 2022	
February 2022	May 2022
University Advisory Committee	Geographic Diversity Advisory Committee
Advisory Committee on Childhood Cancers	Clinical Trials Advisory Committee
Prevention Advisory Committee	Product Development Advisory Committee

Discussion

Six statutorily constituted advisory committees comprised of content experts, practitioners, and patient advocates from across Texas assist CPRIT and its Oversight Committee by focusing upon specific topics and issues critical to CPRIT’s efforts. Pursuant to the advisory committees’ charters, each committee reports to the Oversight Committee at least annually to provide advice on cancer-related topics. The input from its advisory committees equips the Oversight Committee to make informed decisions about CPRIT’s programs and policies.

With the addition of our newest advisory committee, the Geographic Diversity Advisory Committee, Mr. Margo requested that I create a schedule that spreads the six CPRIT advisory committee presentations over more than one regular meeting. We intend this schedule to provide enough time for the reports and valuable follow up discussion between Oversight Committee members and advisory committee representatives, while also balancing the time necessary for other action items on the meeting agenda.

No Oversight Committee action is necessary. CPRIT staff will communicate the proposed schedule to the advisory committees. Future events and advisory committee availability may require CPRIT to revise the schedule; we will notify the Oversight Committee of any change.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: FY 2022 HONORARIA POLICY
DATE: AUGUST 11, 2021

Summary and Recommendation

CPRIT's enabling legislation requires the Chief Executive Officer, with Oversight Committee approval, to adopt a policy for honoraria paid for peer review services. The Oversight Committee approved the FY 2021 honoraria policy at the August 2020 meeting. The proposed FY 2022 honoraria payment structure and amounts remain the same as those approved for FY 2021. I request approval of the FY 2022 honoraria policy. I discussed the FY 2022 policy with the program subcommittees.

Background

CPRIT's Scientific Research and Prevention Programs committee members (also referred to as "peer reviewers") review grant applications and recommend grant awards for meritorious projects addressing cancer prevention and research (including product development) in Texas. State law authorizes CPRIT to pay honoraria to individuals appointed to CPRIT's Scientific Research and Prevention Programs committees (Health and Safety Code § 102.151(d)). The ability to pay honoraria is essential to retaining individuals with the expertise and experience to carry out the complex review process required by CPRIT's statute and administrative rules.

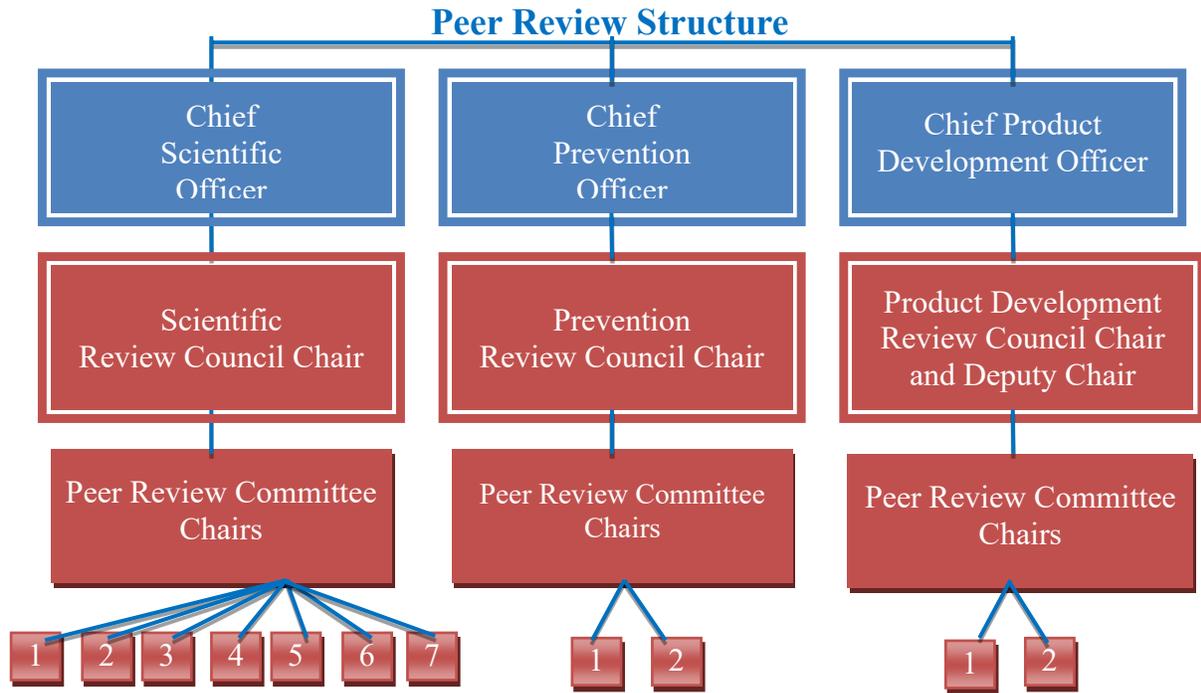
In its January 2013 report, the State Auditor's Office recommended CPRIT implement a process supporting the honorarium it pays, to justify any changes, and to ensure that the honoraria are reasonable and competitive for the value CPRIT receives. The State Auditor also advised CPRIT to adopt documentation and process requirements for honoraria payments. CPRIT's statute reflects the State Auditor's guidance at Texas Health and Safety Code § 102.151(e).

CPRIT's program staff relied upon historical information as well as anticipated workload projections to perform a detailed analysis of the activities, hours, and units for peer reviewer workload. The FY 2022 policy incorporates the roles and responsibilities assigned to Review Council chairs, Peer Review committee chairs, and peer review committee members and justifies the FY 2022 honorarium amount paid for each role. When honoraria rates are not standard across the prevention, academic research, and product development programs, the policy justifies the reasons for paying different amounts.

CPRIT's FY 2022 honoraria policy fully implements the statutory mandate and audit recommendations and I request Oversight Committee approval.

CPRIT PEER REVIEW FY 2022 HONORARIA POLICY¹

Peer review of prevention and research applications is the evaluation process conducted by qualified experts for feasibility, significance, and potential for impact. Like many funding agencies, CPRIT has implemented a tiered peer review process designed to identify the best projects based on excellence, program-specific objectives, and organizational priorities.² Maximizing the success of CPRIT’s academic research, product development, and prevention programs is dependent upon the quality of the peer reviewers CPRIT recruits. Therefore, the peer reviewers must be exceptionally qualified, highly respected, well-established members of the cancer research, product development, and prevention communities.



CPRIT relies upon a pool of more than 200 expert peer reviewers to evaluate, score and rank grant applications based upon significance and merit. As reflected above, the general peer review structure is the same for CPRIT’s three grant programs. CPRIT assigns reviewers to peer review committees based upon their expertise and background. The evaluations conducted by the peer review committees inform the list of grant applications recommended for CPRIT grant awards.³

CPRIT’s expert peer reviewers live and work outside Texas, which is an uncommon requirement among grant-making organizations. CPRIT implemented this peer reviewer qualification to

¹ Adopted pursuant to TEX. HEALTH & SAFETY CODE Section 102.151(e).
² The National Academies of Sciences recommends a tiered approach to peer review.
³ For more information about the grant review process undertaken by the peer review committees, please see CPRIT’s administrative rules, 25 T.A.C. Part 11, Sections 703.6 and 703.7.

ensure an impartial review, minimize conflicts of interest, and provide the opportunity to select the best projects without regard for self-interest.

Honoraria

In recognition of the work undertaken by CPRIT peer reviewers, state law authorizes CPRIT to pay honoraria to its peer reviewers.⁴ CPRIT's ability to pay honoraria is essential to retaining individuals with the expertise and experience to carry out the complex review process required by statute and CPRIT's administrative rules.

CPRIT recruits world-renowned experts who live and work outside of the state to be peer reviewers. CPRIT's residency policy is important to maintaining a review process that minimizes the potential for political and other outside influences, but it means that the CPRIT review process, by design, lacks non-monetary incentives common to other grant review processes that may otherwise justify the time commitment required of CPRIT peer reviewers in addition to their full-time jobs.

Specifically, CPRIT reviewers are not eligible to compete for CPRIT grants. This is different from other cancer grant-making organizations such as National Institutes of Health (NIH), Centers for Disease Control and Prevention, Department of Defense, American Cancer Society, and Susan G. Komen for the Cure. For example, NIH reviewers may review grant applications as well as compete for NIH grants. Familiarity with the NIH review process gained by serving as an NIH peer reviewer provides the individual a significant non-monetary benefit since that understanding better positions the reviewer to compete for and secure NIH grant funds as an applicant. This benefit is not available to CPRIT's reviewers.

A second nonmonetary benefit from serving on a review panel is that such service is an indication of external recognition in one's field, which is essential for academic and industry promotions. Using individuals already well established in their careers means that this is not an incentive for CPRIT peer reviewers to participate.

The Chairs of CPRIT review committees are all highly distinguished in their respective fields and bring enormous stature to the peer review process. Unlike chairs of other review processes, CPRIT's chairs are responsible for recruiting peer reviewers for their panel. In addition, they serve as strategic advisors for CPRIT's grant programs. These responsibilities are unique to CPRIT review committee chairs and require more effort and expertise than simply chairing a committee. Having committee chairs of this caliber distinguishes CPRIT's peer review process from all others.

Honoraria Payment Process and Documentation

Review Council and Committee Chairs receive quarterly honoraria payments directly from CPRIT. The honoraria payment process for Review Council chairs and Committee chairs is as follows:

⁴ TEX. HEALTH & SAFETY CODE Section 102.151(d)

1. At the end of the fiscal quarter, the Review Council chairs and Committee chairs submit to CPRIT a written confirmation of the work performed and an estimate of hours* spent related to CPRIT's peer review activities for the quarter.
2. The CPRIT Program Officer reviews the confirmations and approves payment of quarterly honoraria to the Review Council chair and Committee chairs.
3. CPRIT's financial staff authorizes payment of the honoraria and retains the documentation supporting the honoraria payment.
4. The Chief Compliance Officer and Internal Auditor may also review the confirmations submitted.

* NOTE: CPRIT pays honorarium for the annual service of the Review Council chair or Committee chair. The payment does not use an hourly wage structure; the estimated number of hours devoted to CPRIT activities by a Review Council or Committee chair may vary by quarter depending upon the timing of review cycle activities. CPRIT uses the hourly estimate at the end of the year to set honoraria payment structures for the next fiscal year.

CPRIT's third party grant administrator pays peer reviewers for each review cycle in which they participate. To document the work performed by a peer review committee member for the review cycle, CPRIT's third party grant administrator confirms that the reviewer attended the peer review meeting and submitted written comments and scores for the grants assigned to the reviewer for evaluation.

CPRIT also reimburses travel expenses and pays the Texas state per diem when peer reviewers, Review Council chairs, and Committee chairs travel to attend peer review meetings. CPRIT relies upon standard travel documentation for travel reimbursements.

In the event a Review Council chair, Committee chair, or peer reviewer is not able to complete a full review cycle due to unforeseen circumstances, the CPRIT Program Officer may approve, in his or her discretion, a partial payment of the honorarium. The Program Officer should explain in writing the basis for approving a change to the reviewer's honorarium; CPRIT will retain such explanation as part of the grant review records. Nothing herein prevents the Program Officer from approving full payment even if the reviewer is unable to participate in every aspect of the review cycle so long as the reason is well justified.

Peer Review Responsibilities

All CPRIT programs plan standard multi-cycle grant review activities to fully award all available grant funds allocated for FY 2022. At the time that CPRIT was pricing its FY 2022 third-party grant management contract, significant uncertainty existed regarding whether the COVID-19 pandemic would continue to restrict or otherwise affect in-person meetings and associated travel. To avoid cancellation fees, CPRIT will continue to convene peer review meetings via

videoconference for FY 2022. CPRIT first used videoconference meetings for all peer review activities held after March 2020 and the process has worked well.

Review Council Chairs

The Council Chair works directly with the CPRIT Program Officer to coordinate the peer review activities for each CPRIT program. The CPRIT model for peer review is unique. Other grant-making programs typically use committee chairs only to preside at committee meetings; however, CPRIT engages preeminent experts in their field for the Council Chair and Committee Chair positions to advise CPRIT on program aspects, including the short-term and long-term direction of the program, the review process itself, and the award portfolio composition. The chair's does this work in addition to the administrative tasks associated with chairing Review Council meetings. Many of the Council Chair responsibilities are similar across the three CPRIT programs, including:

- advising on the selection of committee chairs
- recruiting specialized peer reviewers and assisting with peer reviewer selection
- reviewing all abstracts of projects discussed at Prevention, Scientific, and Product Development Review Council meetings
- chairing Review Council meetings
- chairing a peer review panel meeting if a chair has an unexpected conflict⁵
- finalizing grant award recommendations submitted to the Chief Executive Officer
- providing ongoing advice to CPRIT staff on programs, review processes, and future funding opportunities

Estimated Annual Time Commitment: CPRIT expects Council Chairs to commit approximately 300 hours to CPRIT-related activities in FY 2022. This equates to 14.4% of a standard 2080-hour work year. **Table 1** provides a detailed analysis of the activities, hours, and units used to project the Council Chair workload. The information in Table 1 reflects 2018 – 2021 review cycle information and the projected workload for FY 2022.

NOTE: In addition to the regular Council Chair duties in FY 2022, CPRIT anticipates that the Product Development Review Council Chair will perform services totaling 60 additional hours. Examples of the additional activities include coordinating the review of annual progress reports and milestone funding decisions and providing expert advice and assistance related to CPRIT's product development portfolio and substantive grant contract amendment requests. In FY 2016, CPRIT created the Product Development Review Council Deputy Chair position. This position is equivalent to the Council Chair position except that the Deputy Chair will not prepare slate recommendation for the Chief Executive Officer. CPRIT will continue to use a Deputy Chair position for FY 2022.

Hourly Rate Proxy: CPRIT pays honorarium for the annual service of the Review Council chair and is not based on an hourly wage structure. However, for comparison, the honoraria paid to Review Council chairs equate to a \$250/hour rate. This is in line with hourly rates paid for skilled professional services in other industries and less than the \$500/hour rate paid for medical

⁵ The Product Development Committee Chair regularly chairs review committee meetings.

experts in malpractice cases.⁶ The hourly rate used by CPRIT is also likely to be less than rates used to calculate consultant fees for physicians and scientists who advise pharmaceutical companies. Although there is no standard rate for consulting fees, one Texas institution of higher education limits the amount of consulting fees a professor may accept to 25% of their base salary. The capped amount is greater than the \$72,000 - \$83,400 honoraria paid to CPRIT Review Council Chairs.

Review Committee Chairs

A Committee Chair leads each peer review committee. The CPRIT model for peer review is unique. Other grant-making programs typically use committee chairs only to preside at committee meetings; CPRIT engages preeminent experts in their field for the Committee Chair positions to advise CPRIT on program aspects, including the short-term and long-term direction of the program, the review process itself, and the award portfolio composition. The Committee Chair does this work in addition to the administrative tasks associated with chairing peer review committee meetings. Committee Chairs are also members of the Review Council for the program. Duties of the committee chair include:

- recruiting reviewers for their review panels
- assigning applications to their panel members
- becoming familiar with the abstracts and applications assigned to their panel
- determining order of review for applications for panel discussion
- chairing panel discussions; capturing key discussion points
- reviewing full applications to participate in programmatic review meetings
- evaluating CPRIT Scholar recruitment grants (Scientific Review Committee chairs)
- assessing due diligence and intellectual property reports for product development applications (Product Development Review Committee chairs)
- ranking grant applications and developing a list of recommended grant awards and supporting information for consideration by the CPRIT Program Integration Committee
- reviewing annual progress reports and milestone funding decisions (Product Development Program)
- participating in meetings with CPRIT staff to provide advice on future program directions, processes, evaluation criteria, and other related issues

Estimated Annual Time Commitment: The amount of time spent on committee chair activities varies depending on the program. CPRIT expects Review Committee chairs to commit between 190 and 250 hours to CPRIT-related activities in FY 2022. **Table 2** provides a detailed analysis of the activities, hours, and units used to project the committee chair workload. The information in Table 2 reflects 2009 – 2021 review cycle information and the projected workload for FY 2022. Note: For the purposes of the honoraria policy, CPRIT refers to Product Development Review Council members as “committee chairs” and they perform all activities listed in Table 2.

⁶ Data from *National Medical Consultants, P.C.*, a physician owned and operated company representing a panel of over 2700 medical experts who are distinguished specialists in all areas of medicine.

Hourly Rate Proxy: CPRIT pays honorarium for the annual service of the Review Committee chair and is not based on an hourly wage structure. However, for comparison, the honoraria paid to Committee chairs equates to a \$200/hour fee. This is in line with hourly rates paid for skilled professional services in other industries and less than the \$500/hour rate paid for medical experts in malpractice cases.⁷ The hourly rate used by CPRIT is also likely to be less than rates used to calculate consultant fees for physicians and scientists who advise pharmaceutical companies. Although there is no standard rate for consulting fees, one Texas institution of higher education limits the amount of consulting fees a professor may accept to 25% of their base salary. The capped amount is more than the \$37,000 - \$50,000 honoraria paid to CPRIT Review Committee Chairs.

Review Committee Members

The number of peer review committees varies by program based on the volume of grant applications submitted. Peer reviewers are responsible for individually reviewing, scoring and critiquing 6-10 applications per cycle, as well as participating in panel discussions about grant applications assigned to the peer review committee. A reviewer spends 6 – 8 hours for a full review of a single application, but the reviewer may require much more time for complex, highly technical applications. A typical CPRIT grant application averages about 40 pages in length with additional supporting documentation. Applications for multimillion-dollar collaborative research projects and product development projects may be far more extensive.

Estimated Time Commitment per Review Cycle: Peer reviewer activity varies by program and number of applications assigned. CPRIT expects academic research peer reviewers to commit approximately 85 hours per review cycle. Prevention peer reviewers will commit 55-70 hours per cycle. Product Development peer reviewers will commit 100+ hours per cycle. **Table 3** provides a detailed analysis of the activities, hours, and units used to project the peer review workload. The information in Table 3 reflects 2009–2021 review cycle information and the projected workload for FY 2022.

Hourly Rate Proxy: CPRIT pays honorarium to Academic Research and Prevention peer reviewers for a given review cycle, which is not based on an hourly wage structure. However, for comparison, honoraria paid to Academic Research and Prevention peer reviewers equates to a rate of \$50/hour. Honoraria paid to Product Development peer reviewers is \$65/hour. These reviewers must have both academic research and product development backgrounds and are more difficult to recruit. While the hourly rates are significantly less than those paid to professionals of this caliber, the rate is appropriate given the workload and responsibilities compared to Review Council and Committee chairs.

Comparison to other Grant Making Organizations

Grant-making organizations use various models and methods for compensating peer review committee members. A survey of 21 cancer granting organizations reported wide variation among programs such that an average compensation scheme for panel members was not

⁷ Data from *National Medical Consultants, P.C.*, a physician owned and operated company representing a panel of over 2700 medical experts who are distinguished specialists in all areas of medicine.

possible. The disparity among organizations makes it difficult to devise a benchmark compensation method or amount. Reported compensation practices may fail to include intangible benefits available to reviewers in addition to monetary compensation, which further complicates the ability to make a meaningful comparison between CPRIT and other grant-making organizations. As discussed earlier, these non-monetary incentives are unavailable to CPRIT reviewers because of CPRIT's policy to use highly qualified, experienced, out-of-state reviewers.

- International Cancer Research Partners (ICRP) surveyed 31 of its partner organizations and 21 responded. The report found that organizations paid different honoraria depending on the role of the reviewer. Chairs often received more than committee members did, and teleconference or online reviewers typically received less compensation than those members who participated in-person. The report did not compute an average based on the supplied data.⁸
- CPRIT's third party grant administrator reports that two other clients pay reviewers \$1,250 and \$2,000 per review meeting.
- NCI's website reports that NCI pays \$200 per day of review in addition to travel expenses.

⁸ The report did not include a range, but the survey sponsors indicated the range for compensation for panel members was \$150-\$3,000 per day.

Table 1. Council Chair Activities (See Table 4 for an explanation of the correlation between units and hours.)

Table 1 - Review Council Chair Activities, Hours, Units							
Academic Research Review		Prevention Review		Product Development Review			
Units	Activity	Units	Activity	Units		Activity	
				Chair	Deputy		
5	Consult with staff on vision and direction for the program; bi-weekly calls with staff	5	Consult with staff on vision and direction for the program; bi-weekly calls with staff	15	13	Consult with staff on vision and direction for the program; CPRIT 2.0; FY 2023 Program Priorities, bi-weekly conference calls w/ staff Assist in selecting and recruiting review council members and peer reviewers Advise on peer review, and other programmatic processes as needed Review draft RFAs, propose new RFA concepts, etc. Communicate with Review Council members prior to peer review & programmatic mtg Prepare for Programmatic meetings; review materials Lead programmatic review panels; facilitate diligence teleconference calls Prepare slate recommendations for CEO and Oversight Committee Chair Review applications, facilitate panel meetings	
3.5	Help select and recruit Committee Chairs	2	Help select and recruit Committee Chairs	3	2		
6	Advise on peer review, CPRIT 2.0, FY 2023 Program Priorities, and other processes as needed	2	Advise on peer review and other processes as needed	4	4		
5	Review draft RFAs, propose new ones, etc.	4	Review draft RFAs, propose new ones, etc.	7	2		
3	Communicate with Committee Chairs prior to peer review & programmatic mtg	1	Communicate with Committee Chairs prior to peer review & programmatic mtg	7	6		
2	Prepare for Programmatic meetings; review materials	4	Prepare for Programmatic meetings; review materials	2	2		
2	Lead programmatic review	4	Lead programmatic review	5	5		
2	Prepare slate recommendations for CEO and Oversight Committee Chair	1	Prepare slate recommendations for CEO and Oversight Committee Chair	2	0		
24	Review recruitment applications, become familiar with applications for discussion	15	Review abstracts, attend portions of panel meetings, back up for panel Chair	6	6		
6	Lead monthly discussion on recruitment awards	4	Collaborate on articles for publication	4	0		
4	Analyze data for Research program	4	Analyze data for Prevention program	14.5	14.5	Review annual, tranche, and final progress reports, advise on activities of funded product development grants and recommend continued funding.	
		3	Participate in quarterly teleconference				
		6	Review dissemination applications				
		5	Review Annual and Final progress reports				
62.5		60					
\$ 1,200	Unit cost	\$1,200	Unit cost	69.5	54.5		Unit cost
\$ 250	Hourly rate	\$250	Hourly rate				\$1,200
\$75,000	Annual honoraria	\$72,000	Annual honoraria				\$250
							\$83,400
							\$65,400
						Annual honoraria Chair	
						Annual honoraria Deputy Chair	

Table 2. Committee Chair* Activities (See Table 4 for an explanation of the correlation between units and hours.)

Table 2 - Committee Chair Activities, Hours, Units					
Academic Research Review		Prevention Review		Product Development Review	
Units	Activity	Units	Activity	Units	Activity
2	Select/recruit committee members	2	Select/recruit committee members	2	Select/recruit committee members
3	Review draft RFAs and provide input (as needed)	2	Review draft RFAs and provide input (as needed)	10	Review draft RFAs and provide input (as needed); advise on Programmatic process improvements; CPRIT 2.0 and FY 2023 Program Priorities
10	Read abstracts; assign grants to reviewers	12	Read abstracts assigned to their committee; review panel assignments	8	Read applications assigned to their panel
1	Assist with follow up of delinquent reviewers	1	Assist with follow up of delinquent reviewers	3	Participate on assigned Screening Teleconference committee via conference call
4	Chair the assigned committee review process via conference call or in person meeting	6	Chair the assigned committee review process via conference call or in person meeting	5	Participation in peer review meeting and ICON applicant interviews
1	Prepare for Programmatic meetings; review materials	2	Prepare for Programmatic meetings; review materials	7	Participate in debriefing sessions, ad-hoc meetings, discussion of future direction of program, development of new RFAs
1	Participate in Chair’s programmatic review meetings	6	Participate in Chair’s programmatic review & debriefing meetings	15	Review annual, tranche, and final progress reports; advise on activities of funded product development grants and recommend continued funding.
6	Participate in debriefing sessions, discussion of future direction of program, development of new RFAs, CPRIT 2.0 and FY 2023 Program Priorities	2	Participate in debriefing sessions, discussion of future direction of program, development of new RFAs		
		3	Prepare and participate in quarterly Review Council teleconferences		
24	Review recruitment applications	4	Review dissemination applications		
5	Participate in monthly review of recruitment applications	2	Participate in review of dissemination applications		
57		42		50	
\$875	Unit cost	\$875	Unit cost	\$875	Unit cost
\$200	Hourly	\$200	Hourly	\$200	Hourly
\$50,000	\$50,000 Annual honoraria	\$36,750	\$37,000 Annual honoraria	\$43,750	\$44,000 Annual honoraria

See Table 4 for an explanation of the correlation between units and hours.

* For the Product Development Program, the members of the Product Development Review Council fulfill the “Committee Chair” activities.

Table 3. Peer Reviewer Activities per Cycle (See Table 4 for an explanation of the correlation between units and hours.)

Table 3 - Peer Reviewers Activity by Program					
Product Development Review: ~60 reviewers		Prevention Review: ~20 reviewers		Academic Research Review: ~ 130 reviewers	
Units	Activity	Units	Activity	Units	Activity
1	Declaration of expertise and conflicts	1	Declaration of expertise and conflicts	1	Declaration of expertise and conflicts
8	Preparation of full critiques	8	Preparation of full critiques	10	Preparation of critiques*
3	Participation in screening teleconference	1	Premeeting preparation of video conferencing capabilities	1	Premeeting preparation of video conferencing capabilities
1	Premeeting preparation of video conferencing capabilities	4	Participation at meeting	3	Participation at meeting
4	Participation at company presentation peer review meeting	1	Post-meeting discussion**	1	Post-meeting discussion**
1	Post-meeting discussion**	1	Post-meeting survey to provide CPRIT feedback on CPRIT 2.0	1	Post-meeting survey to provide CPRIT feedback on CPRIT 2.0
1	Review of due diligence and intellectual property evaluations				
1	Teleconference discussion of due diligence and intellectual property evaluation				
20	\$325 Unit cost \$65 avg. hourly rate \$6,500 per cycle	16	\$250 Unit cost \$50 avg. hourly rate \$4,000 per cycle	17	\$250 Unit cost \$50 avg. hourly rate \$4,250 per cycle

* This may be less for reviewers that participate only in the preliminary application review. The grant mechanism specifies when CPRIT uses preliminary reviews.

** Post-meeting discussion activities may include finalizing funding recommendations, finalizing critiques, clarifying recommendations related to funding or goals/objective changes, de-briefing about the review cycle, and/or other activities specified by the CPRIT Program Officer.

NOTE: CPRIT pays peer reviewers only for activities in which they participate. For example, participation at a research peer review meeting is 3 units (11-15 hours) and CPRIT values each unit at \$250; thus, the amount paid to an academic research peer reviewer for attendance at a peer review meeting is \$750. If the reviewer was unable to attend the meeting, then CPRIT subtracts \$750 from the honorarium paid to the reviewer. In the event a Review Council chair, Committee chair, or peer reviewer is not able to complete a full review cycle due to unforeseen circumstances, the CPRIT Program Officer may approve, in his or her discretion, a partial payment of the honorarium.

Table 4. Hours and Units Calculation

PARTICIPATION (HOURS)	UNITS		Council Chairs (and Vice Chair)	Committee Chairs	Peer reviewers
1-5	1		Unit Cost		
6-10	2		\$1200	\$875	\$250-\$325
11-15	3		Average Hourly Rate		
16-20	4		\$250	\$200	\$50-\$65
21-25	5		Honoraria		
26-30	6		\$65,400 - \$83,400 annually	\$36,750 - \$50,000 annually	\$4,250 - \$6,500 per cycle
31-35	7				
36-40	8				
41-45	9				
46-50	10				
51-55	11				
56-60	12				
61-65	13				
66-70	14				
71-75	15				



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: SECTION 102.1062 WAIVER—BRANDY FY 2022
DATE: AUGUST 5, 2021

Waiver Request and Recommendation

I request that the Oversight Committee approve a conflict of interest waiver for FY 2022 for Mr. Donald Brandy, CPRIT’s Purchaser and HUB Coordinator, pursuant to Health & Safety Code Section 102.1062 “Exceptional Circumstances Requiring Participation.” The Oversight Committee has approved the same waiver for Mr. Brandy since FY 2015.

Mr. Brandy is not involved in the grant application or reporting process in his official capacity as purchaser of goods and services for the agency. However, the waiver ensures transparency regarding Mr. Brandy’s relationship with some universities that receive CPRIT grants. Furthermore, CPRIT’s Code of Conduct makes it clear that the agency’s conflict of interest provisions apply to any expenditure of CPRIT funds. Although it is unlikely that CPRIT will procure goods and services from a university receiving grant funds from CPRIT, having the conflict of interest waiver in place ensures that Mr. Brandy can perform his duties. Together with the waiver’s proposed limitations, adequate protections are in place to mitigate the opportunity for a conflict of interest to unduly influence agency purchases.

Background

Mr. Brandy serves as the agency purchaser, responsible for planning, organizing, coordinating, and preparing bid specifications and procurement documents to acquire goods and services from vendors and outside contractors used by the agency. The agency purchaser role requires little, if any, involvement with CPRIT’s grant award process because CPRIT’s grant award contracts are not vendor or outside service contracts.

At the time CPRIT hired Mr. Brandy, he requested approval to continue his outside employment as a referee for tennis tournaments held in and around Austin. In addition to refereeing for adult and junior-level tournaments, he serves occasionally as a referee for NCAA tennis matches held at area universities, including The University of Texas at Austin. The university athletic department pays Mr. Brandy for his services as an independent contractor when he referees collegiate matches.

CPRIT employees may engage in outside employment so long as the employment does not detract from the employee’s ability to fulfill his or her responsibilities to CPRIT. Employees

must receive written approval from the CEO to engage in outside employment and I notify the Audit Subcommittee regarding any approvals. I also annually report to the Oversight Committee all approved outside employment. I notified the Audit Subcommittee regarding my approval for Mr. Brandy's outside employment and the subcommittee first discussed it at the December 18, 2014, subcommittee meeting.

Exceptional Circumstances Requiring Mr. Brandy's Participation

To approve a conflict of interest waiver, the Oversight Committee must find that there are exceptional circumstances justifying the conflicted individual's participation in the review process or other expenditure of CPRIT funds.¹

This conflict of interest waiver is different than other waivers I have requested in that it is not seeking a waiver for actions related to CPRIT's grant review or grant monitoring process. As CPRIT's purchaser, I do not anticipate that Mr. Brandy will play any role in the review process for grant applications or grant reports. The purchaser deals only with agency procurement matters and has no influence over the grant award processes of the agency. To the extent that his outside employment necessitates involvement with university personnel, it is with collegiate athletic department staff that have no interaction with researchers working on or applying for grants. Nevertheless, if Mr. Brandy must be part of the review process or grant monitoring activities, he will comply with CPRIT's conflict of interest notification and recusal requirements.

However, as part of his official duties there may be circumstances requiring Mr. Brandy to procure goods or services on CPRIT's behalf from a university that has also employed him as a tennis referee. This is unlikely to occur; to date, CPRIT has had only two service contracts (both now closed) with an academic institution, Texas Tech University and the University of Texas at Austin LBJ School of Public Affairs. However, as CPRIT's lead contact for agency purchases, Mr. Brandy should be able to perform his official duties as fully as possible. Any involvement with university athletic department personnel resulting from his outside employment is unlikely to be the same individuals at the university responsible for contracting with CPRIT.

Proposed Waiver and Limitations

In granting the waiver of the conflict of interest set forth in Health & Safety Code Section 102.106(c)(3), I recommend that the Oversight Committee permit Mr. Brandy to perform all duties assigned as purchaser, subject to the limitations stated below:

1. Provide the Chief Operating Officer a list of universities that have used his services as referee during the past twelve months;
2. Notify the Chief Operating Officer prior to taking any action on a contract or other procurement document that would result in payment of CPRIT funds to a university on the list referenced above; and

¹ CPRIT's Code of Conduct Section III.B(2) states that, "The conflict of interest statutory and administrative rule provisions **apply to any decision to commit CPRIT funds**, whether or not the commitment is part of the grant award process or to a Grant Applicant." (emphasis added)

3. The Chief Operating Officer, in conjunction with the CEO, Chief Compliance Officer and General Counsel, can review the circumstances and determine whether Mr. Brandy should be recused from involvement in the procurement.

Important Information Regarding this Waiver and the Waiver Process

- The Oversight Committee may amend, revoke, or review this waiver, including but not limited to the list of approved activities and duties and the limitations on duties and activities. Approval of any change to the waiver granted shall be by a vote of the Oversight Committee in an open meeting.
- CPRIT limits this waiver to the conflict of interest specified in this request. To the extent that Mr. Brandy has a conflict of interest not addressed in this waiver, then Mr. Brandy will follow the required notification and recusal process.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: SECTION 102.1062 WAIVER – DR. JOHN HELLERSTEDT, FY2022
DATE: AUGUST 5, 2021

Waiver Request and Recommendation

I request that the Oversight Committee approve a conflict of interest waiver for FY 2022 for Program Integration Committee (PIC) member Department of State Health Services (DSHS) Commissioner Dr. John Hellerstedt, pursuant to Health & Safety Code Section 102.1062 “Exceptional Circumstances Requiring Participation.” The waiver is necessary for Commissioner Hellerstedt to participate in CPRIT’s review process as a PIC member if DSHS applies for a CPRIT grant. Together with the waiver’s proposed limitations, adequate protections are in place to mitigate factors other than merit and the established grant criteria affecting the award of grant funds. The waiver is the same as previously approved for the past several years.

Background

Governor Abbott appointed Dr. Hellerstedt as DSHS Commissioner on January 1, 2016. The DSHS Commissioner is a statutorily designated member of the PIC. As a PIC member, Commissioner Hellerstedt must exercise discretion related to whether to recommend applications proposed for grant awards to the Oversight Committee for final approval.

DSHS is a past CPRIT grant recipient of two closed prevention grants. It is possible that DSHS may apply for CPRIT grant funding in the future, which would implicate conflict of interest concerns. Health & Safety Code Section 102.106(c)(3) mandates that a professional conflict of interest exists if a PIC member is an employee of an entity applying to receive or receiving CPRIT funds. Furthermore, CPRIT’s administrative rule 702.13(c) categorizes this type of professional conflict of interest as one that raises the presumption that the existence of the conflict may affect the impartial review of all other grant applications submitted pursuant to the same grant mechanism in the grant review cycle. A person involved in the review process that holds one of the conflicts included in the Section 702.13(c) “super conflict” category must be recused from participating in the “review, discussion, scoring, deliberation and vote on all grant applications competing for the same grant mechanism in the entire grant review cycle, unless a waiver has been granted...”

CPRIT’s administrative rule Section 702.17(3) authorizes the Oversight Committee to approve a waiver that applies for all activities affected by the conflict during the fiscal year.

Exceptional Circumstances Requiring Commissioner Hellerstedt's Participation

To approve a conflict of interest waiver, the Oversight Committee must find that there are exceptional circumstances justifying the conflicted individual's participation in the review process. The statute compels Commissioner Hellerstedt's participation in the review process. The Oversight Committee should grant the proposed waiver so that CPRIT may fulfill legislative intent that the DSHS Commissioner serve as a PIC member. If DSHS applies for a CPRIT grant, the proposed limitations will substantially mitigate any potential for bias.

Proposed Waiver and Limitations

In granting the waiver of the conflict of interest set forth in Section 102.106(c)(3), I recommend that if DSHS applies for a CPRIT grant in FY 2022, the Oversight Committee permit Commissioner Hellerstedt to continue to perform the following activities and duties associated with CPRIT's review process subject to the stated limitations:

1. Attend and participate fully in the PIC meetings except that Commissioner Hellerstedt shall not participate in the PIC's discussion or vote on grant award recommendations to DSHS;
2. Have access to grant application information developed during the grant review process, except for information related to DSHS applicants, if any; and
3. Provide information to the Oversight Committee or CPRIT personnel about the grant review process and applications recommended by the PIC for grant awards, including answering questions raised by the Oversight Committee or CPRIT personnel. If Commissioner Hellerstedt provides information on his own initiative in a review cycle in which DSHS is a grant applicant, the information provided by Commissioner Hellerstedt should be general information related to the overall grant application process and not advocate specifically for grant applications submitted by DSHS.

CPRIT's statute requires the Chief Compliance Officer to attend PIC meetings to document compliance with CPRIT's rules and processes, including adherence to this limitation. The Chief Compliance Officer shall report to the Oversight Committee any violation of this waiver prior to the Oversight Committee's action on the PIC recommendations.

Important Information Regarding this Waiver and the Waiver Process

- The Oversight Committee may amend, revoke, or revise this waiver, including but not limited to the list of approved activities and duties and the limitations on duties and activities. Approval for any change to the waiver granted shall be by a vote of the Oversight Committee in an open meeting.
- CPRIT limits this waiver to the conflict of interest specified in this request. To the extent that Commissioner Hellerstedt has a conflict of interest with an application that is not the conflict identified in Section 102.106(c)(3), then Commissioner Hellerstedt will follow the required notification and recusal process.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: SECTION 102.1062 WAIVER – DR. JAMES WILLSON
DATE: AUGUST 5, 2021

Waiver Request and Recommendation

I request that the Oversight Committee approve a conflict of interest waiver for FY 2022 for Chief Scientific Officer and Program Integration Committee (PIC) member Dr. James Willson, pursuant to Health & Safety Code Section 102.1062 “Exceptional Circumstances Requiring Participation.” Dr. Willson’s son is an Assistant Professor of Instruction in the department of computer science at The University of Texas at Dallas (UTD). Dr. Willson plans to leave CPRIT within the next several months. However, if he remains in his CPRIT role longer than anticipated, the waiver is necessary for Dr. Willson to participate in the FY 2022 review process as a PIC member. I recommend approval because together with the waiver’s proposed limitations, adequate protections are in place to mitigate factors other than merit and the established grant criteria affecting the award of grant funds. This waiver is the same the waiver approved by the Oversight Committee for FY 2021.

Background

Dr. Willson’s son is an employee of UTD, which is an active grant recipient and may apply for additional CPRIT awards in the future. Texas Health & Safety Code § 102.106(c)(3) makes it a professional conflict of interest for a PIC member when a relative of the member is an employee of a grant recipient or grant applicant. Dr. Willson’s son falls within the definition of “relative” because he is related within the second degree of consanguinity to Dr. Willson.

Furthermore, CPRIT’s administrative rule §702.13(c) classifies this type of professional conflict of interest as one that raises the presumption that the existence of the conflict may affect the impartial review of all other grant applications submitted pursuant to the same grant mechanism in the grant review cycle. A person involved in the review process that holds one of the conflicts included in the § 702.13(c) “super conflict” category must be recused from participating in the “review, discussion, scoring, deliberation and vote on all grant applications competing for the same grant mechanism in the entire grant review cycle, unless a waiver has been granted...”

It is reasonable to expect that the same conflict will affect Dr. Willson’s participation in more than one grant review cycle in this fiscal year as well as other grant monitoring activities that Dr. Willson will undertake in FY 2022. CPRIT’s administrative rule § 702.17(3) authorizes the

Oversight Committee to approve a waiver that applies for all activities affected by the conflict during the fiscal year.

Exceptional Circumstances Requiring Dr. Willson's Participation

To approve a conflict of interest waiver, the Oversight Committee must find that there are exceptional circumstances justifying the conflicted individual's participation in the review process. In this case, the statute requires the Chief Scientific Officer to participate in the review process as a PIC member. Granting the proposed waiver fulfills legislative intent that Dr. Willson serve a role in recommending grant applications for the Oversight Committee's consideration. In addition, the proposed limitations mitigate any potential for bias.

Dr. Willson's expertise and experience is important not only to address scientific and technical questions raised by the PIC and Oversight Committee, but also when he acts as the Oversight Committee's "eyes and ears" into the peer review process. Peer review committees are primarily responsible for the work necessary to evaluate grant applications and recommend awards. CPRIT employees may attend peer review meetings but cannot participate in the peer review panel's discussion or scoring of grant applications. By attending the peer review committee meetings, Dr. Willson can credibly relay the peer reviewers' impression of the grant applications and effectively address questions the Oversight Committee may have related to a grant recommendation. Without the waiver Dr. Willson will be unable to attend some peer review committee meetings, limiting his ability to successfully perform his job.

Dr. Willson's attendance at peer review meetings is valuable even for those applications that the review panel does not recommend for grant awards. Grant applicants often contact the program officer after receiving the peer reviewers' written comments and overall score for their applications. Dr. Willson can provide meaningful guidance and feedback to the applicant on the proposal's strengths and weaknesses because he attended the peer review committee meeting when the review panel discussed the application.

Proposed Waiver and Limitations

In granting the waiver of the conflict of interest set forth in Section 102.106(c)(3), I recommend that the Oversight Committee permit Dr. Willson to continue to perform the following activities and duties associated with CPRIT's review process subject to the stated limitations:

1. Assign grant applications, including UTD grant applications, to various peer review committees for peer review evaluation;
2. Attend scientific research peer review committee meetings as an observer, including meetings where the review committee discusses UTD applications;
3. Attend and participate fully in the PIC meetings, subject to the limitation set forth under "Limitations on Duties and Activities."
4. Have access to grant application information developed during the grant review process, including information related to UTD applications;
5. Provide information about grant applications recommended for grant awards to the Oversight Committee or CPRIT personnel, including answering questions raised by the Oversight Committee or CPRIT staff about UTD grant applications. To the extent that Dr. Willson

provides information on his own initiative (e.g., the Chief Scientific Officer's summary of the recommended awards) and not in response to a specific question or request, it should be general information related to the overall grant application process and not advocate specifically for a UTD grant application at the expense of another recommended application.

6. Following the Oversight Committee's approval of a grant award to UTD, Dr. Willson may review and approve programmatic requests associated with UTD grant contracts and grant monitoring activities.

Regarding item number 2, Dr. Willson will continue to follow CPRIT's established policy that prohibits CPRIT employees from actively participating in peer review committee meetings. Dr. Willson may attend the peer review committee meetings as an observer but may not participate in substantive discussion of any grant application, may not score any application, and may not vote on any application. CPRIT contracts with an independent third-party observer to document that all participants follow CPRIT's observer policy. The independent third-party observer report is available to the Oversight Committee prior to any action taken related to the grant award recommendations. Following Oversight Committee action, the independent third-party observer report is publicly available.

LIMITATION ON DUTIES AND ACTIVITIES

Dr. Willson is a member of the PIC. As a PIC member, he exercises discretion in recommending to the Oversight Committee the applications proposed for grant awards by the peer review committees that should receive final approval. Dr. Willson shall not vote on any award recommendation for a grant to UTD.

CPRIT's Chief Compliance Officer attends PIC meetings to document compliance with CPRIT's rules and processes, including adherence to this limitation. Additionally, CPRIT will maintain records documenting any necessary recusal by Dr. Willson under this waiver.

Important Information Regarding this Waiver and the Waiver Process

- The Oversight Committee may amend, revoke, or revise this waiver, including but not limited to the list of approved activities and duties and the limitations on duties and activities. Approval for any change to the waiver granted shall be by a vote of the Oversight Committee in an open meeting.
- CPRIT limits this waiver to the conflict of interest specified in this request. To the extent that Dr. Willson has a conflict of interest with an application that is not the conflict identified in Section 102.106(c)(3), then Dr. Willson will follow the required notification and recusal process.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: SECTION 102.1062 WAIVER—REVIEW COUNCILS FY 2022
DATE: AUGUST 11, 2021

Waiver Request and Recommendation

I request that the Oversight Committee approve a fiscal year 2022 conflict of interest waiver for review council members pursuant to Health & Safety Code § 102.1062 “Exceptional Circumstances Requiring Participation.” Unlike other conflict of interest waivers that the Oversight Committee has approved previously, CPRIT does not granting this waiver for a specific conflict of interest or person. Instead, CPRIT intends to invoke this waiver as necessary to address the unusual scenario when a review council member has a conflict with a grant application that is part of the larger group of proposals that the review panel or review council must act upon (usually to recommend for awards). The waiver is necessary for a review council member to participate in the overall discussion and vote on the slate of award recommendations. This waiver is the same waiver the Oversight Committee approved for FY 2021.

Although it would be ideal to consider each instance individually before granting the conflict of interest waiver, a prospective waiver is necessary in this scenario given the timing of the review process and scheduled Oversight Committee meetings. It is unlikely that review panel schedules will align with Oversight Committee meeting dates such that CPRIT will be able to secure a conflict of interest waiver in time for the review council member to participate in the review process. However, adequate protections are in place that, together with the waiver’s proposed limitations, mitigate the opportunity for factors other than merit and established criteria to influence review council members’ decisions regarding the award of grant funds.

Background

Health & Safety Code § 102.1062 directs the Oversight Committee to adopt administrative rules governing the waiver of the conflict of interest requirements of the statute in exceptional circumstances. CPRIT’s administrative rule § 702.17(3) authorizes the Oversight Committee to approve a waiver that applies for all activities affected by the conflict during the fiscal year. The rules require that a majority of the Oversight Committee members must vote to approve the waiver. CPRIT must report any approved waiver to the lieutenant governor, speaker of the house of representatives, the governor, and the standing committees of each house of the legislature with primary jurisdiction over CPRIT matters.

The issue addressed by this waiver results from of the role review council members play in the review process. At the review panel level, the review council member chairs the review panel meeting. Occasionally, a review council member will identify a conflict of interest with an application assigned to the member's panel. If CPRIT is unable to reassign the application to a different panel, then the review council member follows the process set forth in CPRIT's conflict of interest rules and recuses himself or herself from any discussion, scoring, deliberation, or vote on the application. The proposed waiver will not change the review council member's responsibility to disclose the conflict or to recuse from the review of the application.

The difficulty arises when the review council member must lead the discussion, in his or her role as chair of the review panel, about the group of applications the panel recommends moving forward to the review council. If the application with which the review council member is in conflict advances as part of the group that scored well enough to move forward, the review council member's participation in the discussion of the group violates the member's agreement to not participate in "any discussion" of the conflicted application.

A similar challenge arises at the review council level. If the application that the member is in conflict is part of the group considered by the review council, the conflict of interest rules prohibit the member from participating in the review council's discussion or vote on the group of awards. The review council member is unable to address questions about other applications heard by his or her panel due to his or her recusal from the process, potentially disadvantaging the other applications.

Exceptional Circumstances Requiring the Review Council Member's Participation

To approve a conflict of interest waiver, the Oversight Committee must find that there are exceptional circumstances justifying the conflicted individual's participation in the review process. In this case, exceptional circumstances exist due to the necessity of the review council member's participation in the process to develop the overall award recommendation slates and the Oversight Committee should grant the proposed waiver. The limitations mitigate the potential for bias.

CPRIT's administrative rules require the Chief Compliance Officer to attend or designate an independent third party to attend peer review meetings and review council meetings when the panel discusses grant applications. The third-party observer must document that the reviewers follow CPRIT's grant review process consistently, including observing CPRIT's conflict of interest rules. The third-party observer will document any violation of this waiver in his or her written report, which CPRIT provides to the Oversight Committee prior to the vote on the award recommendations.

Proposed Waiver and Limitations

In granting the conflict of interest waiver, I recommend that CPRIT permit the review council member to continue to perform the following activities and duties associated with CPRIT's review process subject to the stated limitations:

1. The review council member must disclose any conflict in writing pursuant to the electronic grant management process CPRIT has in place.
2. The review council member must recuse himself or herself from participation in the review, discussion, scoring, deliberation, and vote on the specific grant(s) identified as the conflict.
3. When the review panel or review council takes up the grant applications as a group, the review council member may participate in the discussion and vote on the proposed awards, so long as the review council member does not advocate for or against the application that the member has identified as a conflict.
4. Whenever CPRIT invokes this waiver, the Chief Compliance Officer will provide information about the use of the waiver, including the name of the review council member and the identified conflict, in the Chief Compliance Officer's Certification report. I will also include this information in the CEO affidavit I submit for the grant award mechanism.

Due to the nature of the conflict or the type of review process, this conflict of interest waiver will not apply to following:

- When the review council member's conflict of interest is a conflict described by T.A.C. § 702.13(c); or
- When the review council is acting as the only review panel in the review process (e.g., CPRIT recruitment awards and prevention dissemination awards.)

Important Information Regarding this Waiver and the Waiver Process

- The Oversight Committee may amend, revoke, or revise this waiver, including but not limited to the list of approved activities and duties and the limitations on duties and activities. Approval for any change to the waiver granted shall be by a vote of the Oversight Committee in an open meeting.
- CPRIT limits this waiver to review council members operating under the circumstances specified in this request.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS

FROM: KRISTEN PAULING DOYLE, DEPUTY EXECUTIVE OFFICER &
GENERAL COUNSEL
CAMERON L. ECKEL, ASSISTANT GENERAL COUNSEL

SUBJECT: CHAPTER 703 RULE CHANGE PROPOSED FOR FINAL ADOPTION

DATE: AUGUST 6, 2021

Summary and Recommendation

The Board Governance Subcommittee recommends that the Oversight Committee adopt the proposed administrative rule change to Chapter 703 as originally considered at the May 18, 2021, meeting. Once the Oversight Committee approves the final order adopting the rule change, CPRIT will submit the amendment to the Secretary of State and the change will be effective 20 days later.

Discussion

State law requires an agency to set policy using a rulemaking process, which includes an opportunity for public comment on proposed rules and rule changes before the agency formally adopts the policy. CPRIT published the proposed amendment in the June 4, 2021, edition of the *Texas Register*. CPRIT received no public comments regarding the proposed rule change.

The proposed amendment to Texas Administrative Code § 703.26 clarifies that CPRIT may reimburse certain expenses incurred by participants in a cancer clinical trial pursuant to the authority provided by Texas Health and Safety Code Annotated, § 102.203(b). The proposed change makes CPRIT's administrative rules consistent with changes to CPRIT's statute in 2019 that allow reimbursement for certain clinical trial participant costs, including transportation, lodging, and costs reimbursed under a program established pursuant to Texas Health and Safety Code Chapter 50.

The Board Governance Subcommittee met on August 5 to discuss adoption of the proposed rule change to § 703.26 with CPRIT staff. The subcommittee voted to recommend that the Oversight Committee approve adoption of the rule change.

Next Steps

After the Oversight Committee adopts the proposed rule change, CPRIT will submit the final order to the Secretary of State. The rule change becomes effective 20 days after the date CPRIT files the order with the Secretary of State.

The Cancer Prevention and Research Institute of Texas (“CPRIT” or “the Institute”) adopts the amendment to 25 Tex. Admin. Code § 703.26 without changes to the proposed amendment as published in the June 4, 2021, issue of the *Texas Register* (46 TexReg 3498); therefore, the rule will not be republished. The amendment clarifies that CPRIT may reimburse certain expenses incurred by participants in a cancer clinical trial pursuant to the authority provided by Texas Health and Safety Code Annotated, § 102.203(b).

Reasoned Justification

The amendment to § 703.26 makes the Institute’s administrative rules consistent with a statutory change to Texas Health and Safety Code Chapter 102 made by the Legislature in 2019. The 86th Legislature amended CPRIT’s statute to authorize reimbursement for costs of participation incurred by cancer clinical trial participants, including transportation, lodging, and costs reimbursed under a program established pursuant to Texas Health and Safety Code Annotated, Chapter 50 “Cancer Clinical Trial Participation Program.”

Summary of Public Comments and Staff Recommendation

CPRIT did not receive any public comments regarding the amendment to § 703.26; CPRIT staff recommends proceeding with adoption.

Statutory Authority

CPRIT adopts the rule change under the authority of the Texas Health and Safety Code Annotated, § 102.108, which provides the Institute with broad rule-making authority to administer the chapter, including rules for awarding grants.

Certification

The Institute hereby certifies that Kristen Pauling Doyle, Deputy Executive Officer and General Counsel, reviewed the adoption of the rule change and found it to be a valid exercise of the agency’s legal authority.

To be filed with the Office of Secretary of State on August 20, 2021.

<rule>

§703.26. Allowable Costs.

(a) A cost is an Allowable Cost and may be charged to the Grant Award if it is reasonable, allocable, and adequately documented.

(1) A cost is reasonable if the cost does not exceed that which would be incurred by a prudent individual or organization under the circumstances prevailing at the time the decision was made to incur the cost; and is necessary for the performance of the Grant Award defined in the Scope of Work in the Grant Contract.

(2) A cost is allocable if the cost:

(A) Benefits the Grant Award either directly or indirectly, subject to Indirect Cost limits stated in the Grant Contract;

(B) Is assigned the Grant Award in accordance with the relative benefit received;

(C) Is allowed or not prohibited by state laws, administrative rules, contractual terms, or applicable regulations;

(D) Is not included as a cost or used to meet Matching Fund requirements for any other Grant Award in either the current or a prior period; and

(E) Conforms to any limitations or exclusions set forth in the applicable cost principles, administrative rules, state laws, and terms of the Grant Contract.

(3) A cost is adequately documented if the cost is supported by the organization's accounting records and documented consistent with §703.24 of this title (relating to Financial Status Reports).

(b) Grant Award funds must be used for Allowable Costs as provided by the terms of the Grant Contract, Chapter 102, Texas Health and Safety Code, the Institute's administrative rules, and the Uniform Grant Management Standards (UGMS) adopted by the Comptroller's Office. If guidance from the Uniform Grant Management Standards on a particular issue conflicts with a specific provision of the Grant Contract, Chapter 102, Texas Health and Safety Code or the Institute's administrative rules, then the Grant Contract, statute, or Institute administrative rule shall prevail.

(c) An otherwise Allowable Cost will not be eligible for reimbursement if the Grant Recipient incurred the expense outside of the Grant Contract term, unless the Grant Recipient has received written approval from the Institute's Chief Executive Officer to receive reimbursement for expenses incurred prior to the effective date of the Grant Contract.

(d) An otherwise Allowable Cost will not be eligible for reimbursement if the benefit from the cost of goods or services charged to the Grant Award is not realized within the applicable term of the Grant Award. The Grant Award should not be charged for the cost of goods or services that benefit another Grant Award or benefit a period prior to the Grant Contract effective date or after the termination of the Grant Contract.

(e) Grant Award funds shall not be used to reimburse unallowable expenses, including, but not limited to:

(1) Bad debt, such as losses arising from uncollectible accounts and other claims and related costs.

(2) Contributions to a contingency reserve or any similar provision for unforeseen events.

- (3) Contributions and donations made to any individual or organization.
- (4) Costs of entertainment, amusements, social activities, and incidental costs relating thereto, including tickets to shows or sports events, meals, alcoholic beverages, lodging, rentals, transportation and gratuities.
- (5) Costs relating to food and beverage items, unless the food item is related to the issue studied by the project that is the subject of the Grant Award.
- (6) Fines, penalties, or other costs resulting from violations of or failure to comply with federal, state, local or Indian tribal laws and regulations.
- (7) An honorary gift or a gratuitous payment.
- (8) Interest and other financial costs related to borrowing and the cost of financing.
- (9) Legislative expenses such as salaries and other expenses associated with lobbying the state or federal legislature or similar local governmental bodies, whether incurred for purposes of legislation or executive direction.
- (10) Liability insurance coverage.
- (11) Benefit replacement pay or legislatively-mandated pay increases for eligible general revenue-funded state employees at Grant Recipient state agencies or universities.
- (12) Professional association fees or dues for an individual employed by the Grant Recipient. Professional association fees or dues for the Grant Recipient's membership in business, technical, and professional organizations may be allowed, with prior approval from the Institute, if:
 - (A) the professional association is not involved in lobbying efforts; and
 - (B) the Grant Recipient demonstrates how membership in the professional association benefits the Grant Award project(s).
- (13) Promotional items and costs relating to items such as T-shirts, coffee mugs, buttons, pencils, and candy that advertise or promote the project or Grant Recipient.
- (14) Fees for visa services.
- (15) Payments to a subcontractor if the subcontractor working on a Grant Award project employs an individual who is a Relative of the Principal Investigator, Program Director, Company Representative, Authorized Signing Official, or any person designated as Key Personnel for the same Grant Award project (collectively referred to as "affected Relative"), and:
 - (A) the Grant Recipient will be paying the subcontractor with Grant Award funds for any portion of the affected Relative's salary; or

(B) the Relative submits payment requests on behalf of the subcontractor to the Grant Recipient for payment with Grant Award funds.

(C) For exceptional circumstances, the Institute's Chief Executive Office may grant an exception to allow payment of Grant Award funds if the Grant Recipient notifies the Institute prior to finalizing the subcontract. The Chief Executive Officer must notify the Oversight Committee in writing of the decision to allow reimbursement for the otherwise unallowable expense.

(D) Nothing herein is intended to supersede a Grant Recipient's internal policies, to the extent that such policies are stricter.

(16) Fundraising.

(17) Tips or gratuities.

(f) Pursuant to Texas Health and Safety Code Section 102.203(b) the Institute may authorize reimbursement for one or more of the following expenses incurred by a cancer clinical trial participant that are associated with participating in a clinical trial and included in the Grant Recipient's Approved Budget:

(1) transportation, including car mileage, bus fare, taxi or ride hailing fare exclusive of tips, and commercial economy class airfare within the borders of the State of Texas;

(2) lodging, and

(3) any cost reimbursed under a cancer clinical trial participation program established pursuant to Texas Health and Safety Code Chapter 50 (relating to Cancer Clinical Trial Participation Program).

(g) [(f)] The Institute is responsible for making the final determination regarding whether an expense shall be considered an Allowable Cost.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: HEIDI MCCONNELL, CHIEF OPERATING OFFICER
SUBJECT: CHIEF OPERATING OFFICER REPORT
DATE: AUGUST 6, 2021

CPRIT Financial Overview for FY 2021 Quarter 3

FY 2021, Quarter 3 Operating Budget

CPRIT encumbered or expended 68% of the almost \$4.5 million budgeted in Indirect Administration and 92% of the almost \$18 million budgeted in Grant Review and Award Operations. The Grant Review and Award Operations budget includes the majority of the agency's vendor contracts, including the \$9.9 million contract for grant management support services with GDIT.

CPRIT received \$131,989 in revenue sharing payments during the third quarter and another \$62,253 in June and July, which fall in the fourth quarter. FY 2021 deposits total approximately \$261,987. Payments are deposited in the Cancer Prevention and Research Interest and Sinking Fund 5168. The cumulative total of payments received over the agency's lifetime exceeds \$4.9 million.

FY 2021, Quarter 3 Performance Measure Report

CPRIT reported on its two quarterly key performance measures to the Legislative Budget Board. During the third quarter, CPRIT reported one company relocation to the state, meeting the annual target. For the number of people served through CPRIT's prevention and control grants, CPRIT also exceeded the 500,000-person served target with 649,574 people served.

Debt Issuance History

TPFA has issued \$202.9 million of general obligation commercial paper notes on CPRIT's behalf through the end of the third quarter. On August 12, TPFA will have issued another \$57.4 million of commercial paper notes. This is the final tranche issued for FY 2021 and brings the total for the year to \$260.3 million.

FY 2022 Service Contract Renewals

For FY 2022, CPRIT is renewing several contracts below the \$100,000 threshold requiring Oversight Committee approval. Those contracts include:

- Red Flag Reporting to provide fraud, waste, and abuse reporting services for \$2,750;
- Business and Financial Management Solutions to provide peer review monitoring services for \$73,900;

- Health and Human Services Commission to provide human resources and payroll services for \$40,000; and
- Diana Steele to provide scientific editorial services for \$22,993.

Update on the State Auditor's Office (SAO) Audit of CPRIT's Grant Management Processes

The SAO audit team wrapped up their field work in June. The project leader notified CPRIT last week that they anticipate releasing a draft report to CPRIT on August 18. The draft report will be the first opportunity to learn of audit findings. The agency will have an opportunity to comment on the report and provide management responses to address remediation of any identified audit findings. The final report will be released either by the end of August or beginning of September.

Cancer Prevention and Research Institute of Texas
Quarterly Financial Report
As of May 31, 2021

Indirect Administration (B.1.1.)

	2021 Appropriated	2021 Budgeted	% of Total Budget	Actual Expenditures & Grant Encumbrances (FYTD)	Remaining Budget	Percent Expended	Estimated Expenditures (YTD)	Lapse/Overspent
1001 Salaries and Wages	\$ 1,787,425	\$ 1,628,420		\$ 1,032,188	596,232	63%	\$ 1,032,188	\$ 596,232
1002 Other Personnel Costs	38,785	38,785		15,046	23,739	39%	15,046	23,739
2001 Professional Fees and Services	1,808,662	1,924,788		1,302,178	622,610	68%	1,302,178	622,610
2003 Consumable Supplies	24,000	24,000		1,795	22,205	7%	1,795	22,205
2004 Utilities	58,600	58,600		33,085	25,515	56%	33,085	25,515
2005 Travel	45,000	-		-	-	0%	-	-
2006 Rent-Building	11,000	11,000		2,191	8,809	0%	2,191	8,809
2007 Rent-Machine and Other	32,172	32,172		26,000	6,172	81%	26,000	6,172
2009 Other Operating Expenses	554,409	803,569		644,303	159,266	80%	644,303	159,266
Subtotal - Indirect Administration (B.1.1.)	\$ 4,360,053	\$ 4,521,334	1.51%	\$ 3,056,787	\$ 1,464,547	68%	\$ 3,056,787	\$ 1,464,547

Grant Review and Award Operations (A.1.3.)

	2021 Appropriated	2021 Budgeted	% of Total Budget	Actual Expenditures & Grant Encumbrances (FYTD)	Remaining Budget	Percent Expended	Estimated Expenditures (YTD)	Lapse/Overspent
1001 Salaries and Wages	\$ 2,993,084	2,989,144		\$ 2,527,666	\$ 461,478	85%	\$ 2,527,666	\$ 461,478
1002 Other Personnel Costs	45,000	48,940		48,940	0	0%	48,940	0
2001 Professional Fees and Services	9,436,363	14,801,470		13,888,785	912,685	94%	13,888,785	912,685
2003 Consumable Supplies	-	-		-	-	0%	-	-
2004 Utilities	12,000	12,000		10,860	1,140	90%	10,860	1,140
2005 Travel	65,000	-		-	-	0%	-	-
2009 Other Operating Expenses	355,283	127,567		13,396	114,171	11%	13,396	114,171
Subtotal - Grant Operations (A.1.3.)	\$ 12,906,730	\$ 17,979,121	6.00%	\$ 16,489,646	\$ 1,489,475	92%	\$ 16,489,646	\$ 1,489,475

Grants

	2021 Appropriated	2021 Budgeted	% of Total Budget	Actual Expenditures & Grant Encumbrances (FYTD)	Remaining Budget	Percent Expended	Estimated Expenditures (YTD)	Lapse/Overspent
4000 Grants - Prevention (A.1.2)	\$ 28,050,081	\$ 28,080,479		\$ 28,035,081	\$ 45,398	100%	\$ 28,035,081	\$ 45,398
4000 Grants - Research (A.1.1.)	251,620,104	\$ 249,135,528		214,363,822	\$ 34,771,706	86%	214,363,822	34,771,706
Subtotal - Grants	\$ 279,670,185	\$ 277,216,007	92.49%	\$ 242,398,903	\$ 34,817,104	87%	\$ 242,398,903	\$ 34,817,104
Grand Totals	\$ 296,936,968	\$ 299,716,462	100.00%	\$ 261,945,336	\$ 37,771,126	87%	\$ 261,945,336	\$ 37,771,126

**Cancer Prevention and Research Institute of Texas
Cancer Prevention and Research Institute Fund Account - 5136
As of May 31, 2021**

	5/01/2021- 5/31/2021	AY 21 Year to Date as of 5/31/2021
Beginning Balance : 9/01/2020		\$ 600,506
Increases:		
(1)	\$ -	\$ -
(2)	-	
Total Increases	\$ -	\$ 600,506.00
Reductions:		
Expenditures - Appropriated	\$ -	\$ -
	\$ -	\$ -
	\$ -	\$ -
Total Reductions	\$ -	\$ -
Ending Balance: 5/31/2021		\$ 600,506.00

Note: (1) The Institute received a settlement from the Texas Cancer Coalition (TCC). This amount represents the final distribution and transfer of all funds (\$303,877) from the TCC which ceased operations in May 2013. These funds are in the State Treasury but are not appropriated to CPRIT. The beginning balance reflects the transfer of all TCC funds.

**Cancer Prevention and Research Institute of Texas
License Plate Trust Fund Account - 0802
As of May 31, 2021**

	5/01/2021- 5/31/2021	AY 21 Year to Date as of 5/31/2021
Beginning Balance : 9/01/2020		\$ 30,397.95
Increases:		
(1) License Plate Revenue Received	\$ 670.97	\$ 6,493.48
Total Increases	\$ 670.97	\$ 36,891.43
Reductions:		
Expenditures - Appropriated	\$ -	\$ -
	-	-
Total Reductions	\$ -	\$ -
Ending Balance: 5/31/2021		\$ 36,891.43

Note:

Balance forward from 2020 License Plate \$30,397.95

Cancer Prevention and Research Institute of Texas

Appropriated Receipts - 666

As of May 31, 2021

	<u>5/01/2021- 5/31/2021</u>	<u>AY 21 Year to Date as of 5/31/2021</u>
<u>Beginning Balance : 9/01/2020</u>		\$ 83,996.90
Increases:		
(1) Product Development Application Fees Received	\$ -	\$ 24,500.00
(2) Appropriated Receipts applied to payments	\$ -	\$ -
(3) Conference Registration Fees	\$ -	\$ -
(4) Conference Registration Fees-Credit Card	\$ -	\$ -
Total Increases	<u>\$ -</u>	<u>\$ 24,500.00</u>
Reductions:		
Conference Expenditures - Appropriated	\$ -	\$ -
Credit Card Fees Expended	\$ -	\$ -
Refund-Application Fees	\$ -	\$ -
Legal Services Expenses (Application Fees)	\$ -	\$ -
Total Reductions	<u>\$ -</u>	<u>\$ -</u>
<u>Ending Balance: 5/31/2021</u>		<u><u>\$ 108,496.90</u></u>

Forward balance for FY 2020 is \$83,896.90
 Application Fees + \$100 Donation

Cancer Prevention and Research Institute of Texas
Interest & Sinking Fund Account - 5168
As of May 31, 2021

	5/01/2021- 5/31/2021	AY 21 Year to Date as of 5/31/2021
Beginning Balance : 9/01/2020		\$ 2,237,500.68
Increases:		
(1) Revenue Sharing / Royalties	\$ 27,439.28	\$ 199,643.99
Total Increases	\$ 27,439.28	\$ 2,437,144.67
Reductions:		
Expenditures - Appropriated	\$ -	\$ -
	\$ -	-
	\$ -	-
Total Reductions	\$ -	\$ -
Ending Balance: 5/31/2021		\$ 2,437,144.67

Balance forward from FY 2020 is \$2,237,500.68

**Cancer Prevention and Research Institute of Texas
FY 2021, Quarter 3 Performance Measure Report**

Measure	Targeted Performance	QTR 1	QTR 2	QTR 3	QTR 4	Sum of QTRs	% of Mandate Attained
Number of People Served by Institute Funded Prevention and Control Activities	500,000	234,404	172,169	233,001	-	639,574	127.91%
Number of Entities Relocating to TX for Cancer Research Related Projects	1	0	0	1	-	1	100.00%
Annual Age-adjusted Cancer Mortality Rate	145.2	N/A	N/A	N/A	N/A	0	0.00%
Number of Published Articles on CPRIT-Funded Research Projects	1,000	N/A	N/A	N/A	N/A	0	0.00%
Number of New Jobs Created and Maintained	1,500	N/A	N/A	N/A	N/A	0	0.00%

Variance Explanations

Number of People Served by Institute Funded Prevention and Control Activities

CPRIT prevention grantees have continued to be successful at delivering cancer prevention education and clinical services to more people than they anticipated, stretching their CPRIT-grant funds further to serve Texans. During the COVID-19 pandemic, they found alternative means through the use of remote technologies such as the telephone, electronic messages, and videoconferencing, to continue delivering cancer prevention education to Texans. They have also resumed providing cancer prevention clinical services, such as mammograms and colonoscopies, following COVID-19 precautions which include the use of COVID-19 tests and a greater amount of PPE.

Number of Entities Relocating to TX for Cancer Research Related Projects

CPRIT met the target in the third quarter of the year with the relocation of Invecstys USA, Inc. This output is dependent on the number of companies applying for CPRIT Company Awards that can successfully advance through CPRIT's rigorous review and evaluation process, receive an award and actually relocate operations to Texas. Therefore, the results vary. A company must meet 4 of CPRIT's 7 criteria for a relocation to be considered complete.

CPRIT Commercial Paper and G.O. Bond Issuance

Fiscal Year	Amount Appropriated	Dated Issued	Amount Issued	Amount Issued for Fiscal Year	Commercial Paper or GO Bond Issuance	Series	Comments	Interest Rate
2010	\$ 225,000,000	September 9, 2009	\$ 9,100,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2010		September 9, 2009	\$ 3,600,000		Commercial Paper Notes	Series B, Tax-Exempt	Defeased with cash July 2011	
2010		March 12, 2010	\$ 63,800,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2010		August 26, 2010	\$ 148,500,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
				\$ 225,000,000				
2011	\$ 225,000,000	September 7, 2010	\$ 11,800,000		Commercial Paper Notes	Series A, Taxable		
2011		August 10, 2011	\$ 51,000,000		G.O. Bonds	Taxable Series 2011	Par amount of new money	Fixed Rate Bonds All-In-True Interest Cost 4.0144%
2011		August 10, 2011	\$ 232,045,000		G.O. Bonds (Refunding Bonds)	Taxable Series 2011	Par amount of refunding; Refunded \$233.2M of GOCP CPRIT Series A (9/9/09, 3/12/09, 8/26/09, 9/7/10)	Fixed Rate Bonds All-In-True Interest Cost 4.0144%
				\$ 62,800,000				
2012	\$ 300,000,000	September 7, 2011	\$ 3,200,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2012		December 8, 2011	\$ 3,200,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2012		March 2, 2012	\$ 12,300,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2012		June 21, 2012	\$ 15,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2012		August 16, 2012	\$ 42,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
				\$ 75,700,000				
2013	\$ 300,000,000	September 6, 2012	\$ 9,600,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2013		May 16, 2013	\$ 13,400,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
				\$ 23,000,000				
2014	\$ 300,000,000	November 25, 2013	\$ 55,200,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2014		March 13, 2014	\$ 47,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2014		June 17, 2014	\$ 60,300,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2014		July 8, 2014	\$ 233,280,000		G.O. Bonds (Refunding Bonds)	Taxable Series 2014	Par amount of refunding; Refunded \$237.88M of GOCP CPRIT Series A	Fixed Rate Bonds All-In-True Interest Cost 3.327184%
				\$ 162,500,000				
2015	\$ 300,000,000	November 5, 2014	\$ 57,600,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2015		April 29, 2014	\$ 112,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2015		June 26, 2015	\$ 75,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
				\$ 244,600,000				

CPRIT Commercial Paper and G.O. Bond Issuance

Fiscal Year	Amount Appropriated	Dated Issued	Amount Issued	Amount Issued for Fiscal Year	Commercial Paper or GO Bond Issuance	Series	Comments	Interest Rate
2016	\$ 300,000,000	September 22, 2015	\$ 55,400,000		Commercial Paper Notes	Series A, Taxable		
2016		October 29, 2015	\$ 300,000,000		G.O. Bonds (Refunding Bonds)	Taxable Series 2015C	Par amount of refunding; Refunded \$300M of GOCP CPRIT Series A	Fixed Rate Bonds All-In-True Interest Cost 3.299867%
2016		October 29, 2015	\$ 69,800,000		G.O. Bonds	Taxable Series 2015C	Par amount of new money: Disbursed to CPRIT January 2016	Fixed Rate Bonds All-In-True Interest Cost 3.299867%
2016		May 16, 2016	\$ 92,100,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2016		August 29, 2016	\$ 60,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
				\$ 277,300,000				
2017	\$300,000,000	October 19, 2016	\$ 58,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2017		January 5, 2017	\$ 58,900,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2017		February 8, 2017	\$ 269,000,000		G.O. Bonds (Refunding Bonds)	Taxable Series 2017	Par amount of refunding: Refunded \$269M of GOCP CPRIT Series A	Fixed Rate Bonds All-In-True Interest Cost 3.4622%
2017		February 8, 2017	\$ 106,000,000		G.O. Bonds	Taxable Series 2017	Par amount of new money	Fixed Rate Bonds All-In-True Interest Cost 3.4622 %
				\$ 222,900,000				
2018	\$300,000,000	September 29, 2017	\$ 68,200,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2018		March 8, 2018	\$ 99,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
2018		July 11, 2018	\$ 55,000,000		Commercial Paper Notes	Series A, Taxable	Refunded as G.O. Bonds	
				\$ 222,200,000				
2019		September 21, 2018	\$ 222,200,000		G.O. Bond (Refunding Bonds)	Taxable Series 2018	Par amount of refunding: Refunded \$222.2M of GOCP CPRIT Series A	Fixed Rate Bonds All-In-True Interest Cost 3.720632%
2019	\$300,000,000	September 21, 2018	\$ 75,975,000		G.O. Bonds	Taxable Series 2018	Par amount of new money	Fixed Rate Bonds All-In-True Interest Cost 3.720544%
2019		March 28, 2019	\$ 77,725,000		Commercial Paper Notes	Series A, Taxable		Interest rates between 1.90% - 2.55%
2019		July 12, 2019	\$ 54,000,000		Commercial Paper Notes	Series A, Taxable		Interest rates between 1.95% - 2.35%
				\$ 207,700,000				

CPRIT Commercial Paper and G.O. Bond Issuance

Fiscal Year	Amount Appropriated	Dated Issued	Amount Issued	Amount Issued for Fiscal Year	Commercial Paper or GO Bond Issuance	Series	Comments	Interest Rate
2020		September 16, 2019	\$ 64,300,000		Commercial Paper Notes	Series A, Taxable		Interest rate of 2.10%
2020		January 9, 2020	\$ 52,000,000		Commercial Paper Notes	Series A, Taxable		
2020		April 23, 2020	\$ 248,025,000		G.O. Bond (Refunding Bonds)	Taxable Series 2018	Par amount of refunding: Refunded \$243.025M of GOCP CPRIT Series A	Fixed Rate Bonds All-In-True Interest Cost 2.644360%
2020		April 23, 2020	\$ 115,000,000		G.O. Bonds	Taxable Series 2018	Par amount of new money	Fixed Rate Bonds All-In-True Interest Cost 2.644360%
				\$ 231,300,000				
2021	\$300,000,000	September 11, 2020	\$ 75,000,000		Commercial Paper Notes	Series A, Taxable		Interest rate of 0.23% for 90 days
		January 14, 2021	\$ 59,000,000		Commercial Paper Notes	Series A, Taxable		Interest rate of 0.23% for 118 days
		April 29, 2021	\$ 68,900,000		Commercial Paper Notes	Series A, Taxable		Interest rate of 0.18% for 90 days
		August 12, 2021	\$ 57,400,000		Commercial Paper Notes	Series A, Taxable		
				\$ 260,300,000				
TOTAL ISSUED TO DATE				\$ 2,215,300,000				



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

To: OVERSIGHT COMMITTEE
From: HEIDI MCCONNELL, CHIEF OPERATING OFFICER
Subject: CLOSED GRANT AWARD BALANCE DE-OBLIGATION
Date: AUGUST 9, 2021

I am apprising the Oversight Committee that the grants CPRIT awarded in fiscal years 2010, 2011, 2012, and 2013 have all closed. In addition, the majority of grants awarded in fiscal year 2014 are also now closed. Texas Administrative Code § 703.14 states that contracted grants with unspent funds at the time that the “contract is terminated are considered de-obligated” and available for all purposes authorized by the statute. Therefore, the remaining balances of these closed grants are de-obligated.

The attached lists of closed grant awards organized by award year reflect the remaining balances for each award which are de-obligated. The total de-obligated balances for each fiscal year are summarized in the chart below.

Grant Year	De-Obligated Balance
2010	\$34,079,270.54
2011	\$8,991,144.11
2012	\$13,913,327.28
2013	\$4,661,932.87
2014	\$23,166,994.07
TOTAL	\$84,812,668.87

Approximately \$60 million of the de-obligated grant funds are being applied toward funding the grant awards approved by the Oversight Committee in fiscal year 2021. The remaining balance is available to be applied toward funding grant awards in future years to the extent that the balance is not reduced by the unbudgeted draws by the Employees Retirement System to pay post-retirement benefits of former Texas Cancer Registry employees at the Department of State Health Services or former CPRIT employees. There is also no guarantee that closed grant balances will remain as high as they were in the early years of the agency. The reason for most of the high remaining grant balances are large grants that were terminated early for various reasons.

The use of de-obligated funds from closed grant awards does not modify CPRIT’s annual appropriations authority, general obligation bond authority, or any other financial regulation that the agency must follow. Its main purpose is a cash management tool.

Attachments include AY10, AY11, AY12, AY13, and AY14 Grant Activity summaries.

AY 10 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
PP100016	University of Houston	\$ 272,753.00	\$ 266,692.01	\$ 6,060.99
PP100022	UT Southwestern Medical Center	\$ 999,960.00	\$ 911,057.51	\$ 88,902.49
PP100039	UT Southwestern Medical Center	\$ 898,662.00	\$ 657,626.26	\$ 241,035.74
PP100047	UT Southwestern Medical Center	\$ 299,999.00	\$ 290,265.87	\$ 9,733.13
PP100067	UT Health Science Center San Antonio	\$ 299,957.00	\$ 298,718.40	\$ 1,238.60
PP100069	Univ of North Texas HSC Ft Worth	\$ 299,930.00	\$ 297,137.81	\$ 2,792.19
PP100075	Asian American Health, dba Hope Clinic	\$ 288,395.00	\$ 273,303.83	\$ 15,091.17
PP100077	UT Health Science Center Houston	\$ 961,021.00	\$ 945,763.13	\$ 15,257.87
PP100087	Mercy Ministries of Laredo	\$ 300,000.00	\$ 300,000.00	\$ -
PP100090	Baylor College of Medicine	\$ 953,131.00	\$ 897,125.88	\$ 56,005.12
PP100096	The Rose	\$ 998,045.00	\$ 998,045.00	\$ -
PP100104	University Health System	\$ 300,000.00	\$ 296,855.46	\$ 3,144.54
PP100124	UT Health Science Center Houston	\$ 138,768.00	\$ 138,189.42	\$ 578.58
PP100136	UT M.D. Anderson Cancer Center	\$ 271,189.00	\$ 106,377.57	\$ 164,811.43
PP100137	Texas Tech University HSC	\$ 300,000.00	\$ 300,000.00	\$ -
PP100147	Texas Medical Association	\$ 500,000.00	\$ 424,709.97	\$ 75,290.03
PP100153	UT M.D. Anderson Cancer Center	\$ 250,127.00	\$ 239,494.96	\$ 10,632.04
PP100157	UT M.D. Anderson Cancer Center	\$ 298,531.00	\$ 183,442.51	\$ 115,088.49
PP100161	Livestrong	\$ 250,000.00	\$ 250,000.00	\$ -
PP100165	UT Medical Branch at Galveston	\$ 15,000.00	\$ 14,392.92	\$ 607.08
PP100174	Texas Tech University HSC	\$ 1,682,980.00	\$ 1,604,777.40	\$ 78,202.60
PP100176	Shannon Business Services	\$ 255,198.00	\$ 248,454.44	\$ 6,743.56
PP100195	Univ of North Texas HSC Ft Worth	\$ 298,148.00	\$ 297,494.81	\$ 653.19
PP100201	Baylor College of Medicine	\$ 2,499,970.00	\$ 2,450,364.14	\$ 49,605.86
PP100203	TAMUSHSC Research Foundation	\$ 299,861.00	\$ 296,515.07	\$ 3,345.93
PP100214	Texas A&M University	\$ 300,000.00	\$ 297,807.19	\$ 2,192.81
PP100215	Texas AgriLife Extension Service	\$ 300,000.00	\$ 297,309.39	\$ 2,690.61
PP100228	City of Laredo Health Department	\$ 2,497,500.00	\$ 2,484,848.04	\$ 12,651.96
PP100230	University Health System	\$ 285,706.00	\$ 204,258.53	\$ 81,447.47
PP100233	Texas Nurses Foundation	\$ 299,209.00	\$ 251,036.20	\$ 48,172.80
PP100238	Texas Nurses Foundation	\$ 431,243.00	\$ 420,477.38	\$ 10,765.62
HIRP100963	InGeneron Inc	\$ 198,111.00	\$ 78,944.52	\$ 119,166.48
R1009	Peloton Therapeutics	\$ 11,044,931.00	\$ 4,939,997.37	\$ 6,104,933.63
RP101009	Visualase Inc	\$ 2,151,776.00	\$ 1,841,699.59	\$ 310,076.41
RP101216	Apollo Endosurgery	\$ 5,001,063.00	\$ 5,001,063.00	\$ -
RP101219	Mirna Therapeutics Inc	\$ 10,297,454.00	\$ 5,297,454.00	\$ 5,000,000.00
RP101287	Myriad RBM	\$ 3,024,432.00	\$ 3,024,432.00	\$ -
HIRP100107	UT Health Science Center Houston	\$ 200,000.00	\$ 199,997.78	\$ 2.22
HIRP100189	Rice University	\$ 200,000.00	\$ 142,527.44	\$ 57,472.56
HIRP100400	UT Health Science Center Houston	\$ 200,000.00	\$ 199,994.79	\$ 5.21
HIRP100406	Baylor University	\$ 200,000.00	\$ 199,460.02	\$ 539.98

AY 10 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
HIRP100430	UT M.D. Anderson Cancer Center	\$ 200,000.00	\$ 95,077.86	\$ 104,922.14
HIRP100437	UT Southwestern Medical Center	\$ 200,000.00	\$ 191,849.36	\$ 8,150.64
HIRP100473	Texas AgriLife Research	\$ 199,894.00	\$ 198,438.11	\$ 1,455.89
HIRP100475	Baylor College of Medicine	\$ 200,000.00	\$ 199,997.92	\$ 2.08
HIRP100612	University of Texas at Austin	\$ 200,000.00	\$ 198,950.89	\$ 1,049.11
HIRP100680	Methodist Hospital Research Institute	\$ 199,725.00	\$ 138,301.06	\$ 61,423.94
HIRP100686	UT M.D. Anderson Cancer Center	\$ 200,000.00	\$ 197,186.52	\$ 2,813.48
HIRP100708	UT M.D. Anderson Cancer Center	\$ 200,000.00	\$ 199,996.64	\$ 3.36
HIRP100756	Texas Tech University	\$ 199,796.00	\$ 198,886.01	\$ 909.99
HIRP101016	UT Southwestern Medical Center	\$ 198,947.00	\$ 198,940.84	\$ 6.16
R1001	UT Health Science Center San Antonio	\$ 1,999,705.00	\$ 1,990,059.00	\$ 9,646.00
R1002	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
R1003	University of Texas at Austin	\$ 2,000,000.00	\$ 1,999,559.45	\$ 440.55
R1004	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 1,995,228.00	\$ 4,772.00
R1005	UT M.D. Anderson Cancer Center	\$ 3,500,000.00	\$ 3,387,851.18	\$ 112,148.82
R1006	UT Health Science Center Houston	\$ 2,000,000.00	\$ 1,999,669.95	\$ 330.05
R1007	Methodist Hospital Research Institute	\$ 2,000,000.00	\$ 1,932,715.00	\$ 67,285.00
R1008	UT Southwestern Medical Center	\$ 4,500,000.00	\$ 4,499,959.28	\$ 40.72
RP100094	UT M.D. Anderson Cancer Center	\$ 939,821.00	\$ 939,819.97	\$ 1.03
RP100119	UT Southwestern Medical Center	\$ 1,305,611.00	\$ 1,291,132.67	\$ 14,478.33
RP100146	UT Southwestern Medical Center	\$ 1,144,531.00	\$ 1,144,531.00	\$ -
RP100188	Baylor College of Medicine	\$ 814,544.00	\$ 814,544.00	\$ -
RP100202	UT M.D. Anderson Cancer Center	\$ 777,451.00	\$ 777,450.97	\$ 0.03
RP100233	UT M.D. Anderson Cancer Center	\$ 2,528,196.00	\$ 2,449,120.60	\$ 79,075.40
RP100320	Baylor College of Medicine	\$ 947,367.00	\$ 947,367.00	\$ -
RP100329	UT M.D. Anderson Cancer Center	\$ 558,951.00	\$ 555,213.61	\$ 3,737.39
RP100348	Baylor College of Medicine	\$ 789,473.00	\$ 783,773.52	\$ 5,699.48
RP100402	UT Southwestern Medical Center	\$ 1,221,879.00	\$ 1,220,743.85	\$ 1,135.15
RP100421	Baylor College of Medicine	\$ 1,105,262.00	\$ 1,096,538.35	\$ 8,723.65
RP100429	UT M.D. Anderson Cancer Center	\$ 949,549.00	\$ 944,985.41	\$ 4,563.59
RP100443	UT M.D. Anderson Cancer Center	\$ 1,441,152.00	\$ 1,292,740.82	\$ 148,411.18
RP100456	UT Southwestern Medical Center	\$ 755,754.00	\$ 755,487.92	\$ 266.08
RP100457	UT M.D. Anderson Cancer Center	\$ 842,104.00	\$ 804,798.58	\$ 37,305.42
RP100469	UT M.D. Anderson Cancer Center	\$ 2,849,974.00	\$ 2,788,772.85	\$ 61,201.15
RP100483	UT Health Science Center Houston	\$ 1,451,875.00	\$ 1,451,274.76	\$ 600.24
RP100484	Baylor College of Medicine	\$ 1,128,885.00	\$ 1,013,439.68	\$ 115,445.32
RP100502	UT Health Science Center Houston	\$ 1,093,462.00	\$ 1,092,407.42	\$ 1,054.58
RP100516	UT Southwestern Medical Center	\$ 721,209.00	\$ 705,480.50	\$ 15,728.50
RP100528	Baylor College of Medicine	\$ 947,367.00	\$ 888,904.32	\$ 58,462.68
RP100535	UT M.D. Anderson Cancer Center	\$ 813,681.00	\$ 803,888.16	\$ 9,792.84
RP100550	UT Southwestern Medical Center	\$ 818,731.00	\$ 815,294.49	\$ 3,436.51

AY 10 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP100561	UT Southwestern Medical Center	\$ 1,130,243.00	\$ 1,130,243.00	\$ -
RP100602	UT M.D. Anderson Cancer Center	\$ 1,460,523.00	\$ 1,453,928.33	\$ 6,594.67
RP100625	UT Southwestern Medical Center	\$ 1,173,255.00	\$ 1,169,466.93	\$ 3,788.07
RP100627	Methodist Hospital Research Institute	\$ 1,155,019.00	\$ 1,152,971.64	\$ 2,047.36
RP100644	UT Southwestern Medical Center	\$ 857,106.00	\$ 854,715.00	\$ 2,391.00
RP100670	University of Texas at Austin	\$ 527,974.00	\$ 411,459.25	\$ 116,514.75
RP100674	UT Southwestern Medical Center	\$ 587,042.00	\$ 581,515.28	\$ 5,526.72
RP100678	UT Health Science Center Houston	\$ 1,280,107.00	\$ 1,280,103.37	\$ 3.63
RP100695	UT M.D. Anderson Cancer Center	\$ 971,675.00	\$ 965,536.80	\$ 6,138.20
RP100718	University of Texas at Dallas	\$ 886,693.00	\$ 881,821.37	\$ 4,871.63
RP100726	UT M.D. Anderson Cancer Center	\$ 784,241.00	\$ 784,241.00	\$ -
RP100728	Baylor College of Medicine	\$ 939,760.00	\$ 939,308.87	\$ 451.13
RP100735	University of Texas at Austin	\$ 1,094,486.00	\$ 916,930.79	\$ 177,555.21
RP100762	Texas Tech University HSC	\$ 1,220,556.00	\$ 1,218,815.31	\$ 1,740.69
RP100768	UT M.D. Anderson Cancer Center	\$ 978,679.00	\$ 967,010.58	\$ 11,668.42
RP100773	UT M.D. Anderson Cancer Center	\$ 963,854.00	\$ 825,120.84	\$ 138,733.16
RP100777	UT Southwestern Medical Center	\$ 900,212.00	\$ 868,950.28	\$ 31,261.72
RP100781	TAMUSHSC Research Foundation	\$ 947,367.00	\$ 933,627.53	\$ 13,739.47
RP100782	UT Southwestern Medical Center	\$ 1,149,584.00	\$ 1,147,069.69	\$ 2,514.31
RP100805	Baylor College of Medicine	\$ 871,940.00	\$ 871,940.00	\$ -
RP100841	UT Southwestern Medical Center	\$ 947,367.00	\$ 947,086.70	\$ 280.30
RP100846	UT Southwestern Medical Center	\$ 1,555,050.00	\$ 1,550,670.71	\$ 4,379.29
RP100861	Baylor College of Medicine	\$ 1,000,161.00	\$ 998,758.34	\$ 1,402.66
RP100865	UT Health Science Center Houston	\$ 1,448,244.00	\$ 1,443,778.93	\$ 4,465.07
RP100890	University of Texas at Austin	\$ 2,025,246.00	\$ 1,950,502.01	\$ 74,743.99
RP100900	UT Southwestern Medical Center	\$ 1,490,711.00	\$ 1,484,551.31	\$ 6,159.69
RP100932	Rice University	\$ 1,834,699.00	\$ 1,834,698.79	\$ 0.21
RP100934	UT M.D. Anderson Cancer Center	\$ 913,709.00	\$ 760,883.23	\$ 152,825.77
RP100941	UT Southwestern Medical Center	\$ 682,622.00	\$ 629,673.58	\$ 52,948.42
RP100960	UT M.D. Anderson Cancer Center	\$ 1,198,243.00	\$ 1,166,664.55	\$ 31,578.45
RP100976	UT Southwestern Medical Center	\$ 737,315.00	\$ 733,029.26	\$ 4,285.74
RP101017	Baylor College of Medicine	\$ 789,473.00	\$ 786,405.00	\$ 3,068.00
RP101042	Texas Tech University HSC	\$ 601,729.00	\$ 601,168.90	\$ 560.10
RP101073	Texas Tech University HSC	\$ 742,572.00	\$ 742,571.00	\$ 1.00
RP101075	UT Southwestern Medical Center	\$ 1,202,854.00	\$ 1,202,854.00	\$ -
RP101089	Baylor College of Medicine	\$ 2,023,533.00	\$ 1,537,224.35	\$ 486,308.65
RP101120	Baylor College of Medicine	\$ 741,765.00	\$ 737,148.37	\$ 4,616.63
RP101195-C01	UT Health Science Center San Antonio	\$ 278,495.00	\$ 278,495.00	\$ -
RP101195-C02	Baylor College of Medicine	\$ 84,774.00	\$ 71,218.97	\$ 13,555.03
RP101195-C03	UT Southwestern Medical Center	\$ 181,967.00	\$ 167,263.13	\$ 14,703.87
RP101195-C04	UT Health Science Center San Antonio	\$ 776,608.00	\$ 607,284.44	\$ 169,323.56

AY 10 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP101195-P01	Baylor College of Medicine	\$ 214,458.00	\$ 176,879.77	\$ 37,578.23
RP101195-P02	Baylor College of Medicine	\$ 703,046.00	\$ 418,650.91	\$ 284,395.09
RP101195-P03	UT Southwestern Medical Center	\$ 70,000.00	\$ 67,475.12	\$ 2,524.88
RP101207-C01	UT Medical Branch at Galveston	\$ 827,528.00	\$ 774,795.52	\$ 52,732.48
RP101207-C02	UT Medical Branch at Galveston	\$ 741,183.00	\$ 659,441.50	\$ 81,741.50
RP101207-C03	UT Medical Branch at Galveston	\$ 274,491.00	\$ 260,036.98	\$ 14,454.02
RP101207-C04	UT Medical Branch at Galveston	\$ 309,865.00	\$ 264,448.64	\$ 45,416.36
RP101207-P01	UT Medical Branch at Galveston	\$ 508,517.00	\$ 503,646.72	\$ 4,870.28
RP101207-P02	UT M.D. Anderson Cancer Center	\$ 872,325.00	\$ 827,965.89	\$ 44,359.11
RP101207-P03	UT Medical Branch at Galveston	\$ 554,487.00	\$ 552,533.99	\$ 1,953.01
RP101207-P04	UT M.D. Anderson Cancer Center	\$ 772,779.00	\$ 761,300.21	\$ 11,478.79
RP101215	UT M.D. Anderson Cancer Center	\$ 25,000.00	\$ 16,260.86	\$ 8,739.14
RP101218	Statewide Clinical Trials Network (CTNET)	\$ 25,213,675.00	\$ 9,456,234.00	\$ 15,757,441.00
RP101230	UT M.D. Anderson Cancer Center	\$ 22,600.00	\$ -	\$ 22,600.00
RP101243-C01	UT Southwestern Medical Center	\$ 92,666.00	\$ 92,638.84	\$ 27.16
RP101243-P02	UT Southwestern Medical Center	\$ 640,609.00	\$ 627,664.77	\$ 12,944.23
RP101243-P03	UT Southwestern Medical Center	\$ 638,147.00	\$ 638,101.56	\$ 45.44
RP101243-P04	UT Southwestern Medical Center	\$ 792,841.00	\$ 792,519.59	\$ 321.41
RP101243-P05	UT M.D. Anderson Cancer Center	\$ 474,644.00	\$ 465,003.87	\$ 9,640.13
RP101251-P01	UT Southwestern Medical Center	\$ 108,292.00	\$ 106,668.28	\$ 1,623.72
RP101251-P02	Baylor College of Medicine	\$ 856,962.00	\$ 787,542.95	\$ 69,419.05
RP101251-P03	UT M.D. Anderson Cancer Center	\$ 273,684.00	\$ 272,617.35	\$ 1,066.65
RP101251-P04	Baylor College of Medicine	\$ 609,998.00	\$ 608,993.49	\$ 1,004.51
RP101251-P05	UT Southwestern Medical Center	\$ 1,618,023.00	\$ 1,599,287.88	\$ 18,735.12
RP101251-P06	UT Southwestern Medical Center	\$ 500,000.00	\$ 499,637.35	\$ 362.65
RP101251-P07	Baylor College of Medicine	\$ 608,990.00	\$ 608,370.29	\$ 619.71
RP101255	UT Health Science Center Houston	\$ 12,000.00	\$ 2,436.15	\$ 9,563.85
RP101280	UT Southwestern Medical Center	\$ 25,000.00	\$ 18,791.51	\$ 6,208.49
RP101335-C01	Baylor College of Medicine	\$ 260,659.00	\$ 226,081.12	\$ 34,577.88
RP101335-C02	Baylor College of Medicine	\$ 350,265.00	\$ 350,254.75	\$ 10.25
RP101335-C03	Baylor College of Medicine	\$ 317,547.00	\$ 316,290.29	\$ 1,256.71
RP101335-C04	Baylor College of Medicine	\$ 277,968.00	\$ 210,433.86	\$ 67,534.14
RP101335-P01	Baylor College of Medicine	\$ 620,168.00	\$ 620,167.95	\$ 0.05
RP101335-P02	Baylor College of Medicine	\$ 932,059.00	\$ 920,476.76	\$ 11,582.24
RP101335-P03	Baylor College of Medicine	\$ 815,468.00	\$ 776,418.60	\$ 39,049.40
RP101353-P01	Baylor College of Medicine	\$ 757,570.71	\$ 605,550.47	\$ 152,020.24
RP101353-P02	Baylor College of Medicine	\$ 919,068.05	\$ 867,386.91	\$ 51,681.14
RP101353-P03	Baylor College of Medicine	\$ 684,232.07	\$ 587,815.99	\$ 96,416.08
RP101353-P04	Baylor College of Medicine	\$ 407,242.42	\$ 404,344.99	\$ 2,897.43
RP101353-P05	Baylor College of Medicine	\$ 1,734,521.57	\$ 1,734,433.60	\$ 87.97
RP101353-P06	Baylor College of Medicine	\$ 473,123.91	\$ 473,105.50	\$ 18.41

AY 10 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP101353-P07	Baylor College of Medicine	\$ 729,487.88	\$ 607,998.48	\$ 121,489.40
RP101353-P08	Gradalis Inc	\$ 806,790.75	\$ 762,131.03	\$ 44,659.72
RP101353-P09	UT Medical Branch at Galveston	\$ 77,950.86	\$ 77,950.86	\$ -
RP101353-P11	Baylor College of Medicine	\$ 73,694.64	\$ 11,347.17	\$ 62,347.47
RP101353-P12	Texas Tech University HSC	\$ 527,823.00	\$ 512,338.77	\$ 15,484.23
RP101362	UT Southwestern Medical Center	\$ 17,000.00	\$ 5,075.01	\$ 11,924.99
RP101374	UT M.D. Anderson Cancer Center	\$ 15,000.00	\$ 10,735.95	\$ 4,264.05
RP101380	Texas Life Science Foundation	\$ 7,745.00	\$ 3,422.79	\$ 4,322.21
RP101382-C01	UT Health Science Center Houston	\$ 551,260.00	\$ 408,915.63	\$ 142,344.37
RP101382-C02	UT M.D. Anderson Cancer Center	\$ 747,757.00	\$ 740,776.45	\$ 6,980.55
RP101382-C03	UT Health Science Center San Antonio	\$ 556,101.00	\$ 556,101.00	\$ -
RP101382-P01	Rice University	\$ 3,373,466.00	\$ 2,745,879.50	\$ 627,586.50
RP101382-P02	UT Health Science Center San Antonio	\$ 806,399.00	\$ 723,664.79	\$ 82,734.21
RP101399	Univ of North Texas HSC Ft Worth	\$ 9,500.00	\$ 5,775.35	\$ 3,724.65
RP101489	University of Houston	\$ 2,387,664.00	\$ 1,937,030.03	\$ 450,633.97
RP101491	UT Health Science Center San Antonio	\$ 2,389,107.00	\$ 2,389,073.99	\$ 33.01
RP101496	UT Southwestern Medical Center	\$ 2,881,578.00	\$ 2,876,040.99	\$ 5,537.01
RP101499	Baylor College of Medicine	\$ 2,361,945.00	\$ 2,286,157.54	\$ 75,787.46
RP101501	University of Texas at Austin	\$ 2,486,841.00	\$ 2,414,959.09	\$ 71,881.91
RP101502	UT M.D. Anderson Cancer Center	\$ 2,565,789.00	\$ 2,384,886.03	\$ 180,902.97
RP101503	UT Health Science Center Houston	\$ 2,617,614.00	\$ 2,600,183.53	\$ 17,430.47
	Grand Total	\$216,192,105.86	\$ 178,757,027.09	\$ 34,079,270.54

AY 11 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
PP110026	UT M.D. Anderson Cancer Center	\$ 299,947.00	\$ 250,404.13	\$ 49,542.87
PP110036	TAMUS HSC Research Foundation	\$ 295,040.00	\$ 293,033.41	\$ 2,006.59
PP110040	South Texas Rural Health Services	\$ 149,971.00	\$ 149,971.00	\$ -
PP110057	UT Health Science Center San Antonio	\$ 295,859.00	\$ 294,483.03	\$ 1,375.97
PP110058	Texas A&M University	\$ 539,227.00	\$ 321,782.58	\$ 217,444.42
PP110060	Texas Tech University	\$ 293,240.00	\$ 293,099.53	\$ 140.47
PP110061	University of North Texas HSC Ft Worth	\$ 296,150.00	\$ 286,167.80	\$ 9,982.20
PP110066	University Health System	\$ 289,579.00	\$ 279,325.87	\$ 10,253.13
PP110081	UT Health Science Center Houston	\$ 599,724.00	\$ 585,733.83	\$ 13,990.17
PP110086	Texas Tech University	\$ 299,306.00	\$ 247,551.93	\$ 51,754.07
PP110091	The Cooper Institute	\$ 591,384.00	\$ 572,381.73	\$ 19,002.27
PP110094	El Milagro Clnic	\$ 149,100.00	\$ 147,997.36	\$ 1,102.64
PP110097	UT Southwestern Medical Center	\$ 803,816.00	\$ 668,214.37	\$ 135,601.63
PP110099	MHMR of Tarrant County	\$ 149,812.00	\$ 149,185.32	\$ 626.68
PP110101	Asian American Health, dba Hope Clinic	\$ 965,881.00	\$ 950,390.25	\$ 15,490.75
PP110102	Texas Nurses Foundation	\$ 287,774.00	\$ 194,936.22	\$ 92,837.78
PP110110	Methodist Richardson Medical Ctr	\$ 535,540.00	\$ 535,540.00	\$ -
PP110117	UT Health Science Center San Antonio	\$ 671,559.00	\$ 575,135.38	\$ 96,423.62
PP110120	University Health System	\$ 731,408.00	\$ 681,122.49	\$ 50,285.51
PP110121	SETON Family of Hospitals	\$ 562,004.00	\$ 501,481.20	\$ 60,522.80
PP110124	Migrant Clinicians Network	\$ 473,405.00	\$ 473,405.00	\$ -
PP110136	The Bridge Breast Network	\$ 977,603.00	\$ 977,297.89	\$ 305.11
R1101	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,999,551.05	\$ 448.95
R1103	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,996,539.35	\$ 3,460.65
RP110005	Baylor College of Medicine	\$ 524,044.00	\$ 524,044.00	\$ -
RP110025	UT M.D. Anderson Cancer Center	\$ 1,226,680.00	\$ 1,171,139.18	\$ 55,540.82
RP110028	Baylor College of Medicine	\$ 1,486,780.00	\$ 1,484,808.21	\$ 1,971.79
RP110040	Baylor College of Medicine	\$ 1,016,690.00	\$ 1,016,491.08	\$ 198.92
RP110041	UT Southwestern Medical Center	\$ 941,314.00	\$ 895,751.94	\$ 45,562.06
RP110050	Baylor College of Medicine	\$ 1,149,256.00	\$ 1,149,256.00	\$ -
RP110054	UT M.D. Anderson Cancer Center	\$ 1,481,309.00	\$ 1,415,325.87	\$ 65,983.13
RP110069	University of Texas at Dallas	\$ 1,027,278.00	\$ 1,011,281.82	\$ 15,996.18
RP110070	UT Southwestern Medical Center	\$ 1,209,248.00	\$ 1,199,735.11	\$ 9,512.89
RP110075	UT Health Science Center San Antonio	\$ 499,998.00	\$ 166,446.83	\$ 333,551.17
RP110076	UT Southwestern Medical Center	\$ 787,496.00	\$ 787,433.31	\$ 62.69
RP110080	UT Southwestern Medical Center	\$ 519,942.00	\$ 518,987.20	\$ 954.80
RP110090	UT Southwestern Medical Center	\$ 200,000.00	\$ 198,293.89	\$ 1,706.11
RP110098	University of Texas at Austin	\$ 595,371.00	\$ 488,289.73	\$ 107,081.27
RP110107	UT M.D. Anderson Cancer Center	\$ 1,010,066.00	\$ 1,009,902.66	\$ 163.34
RP110129	Baylor College of Medicine	\$ 200,000.00	\$ 157,544.49	\$ 42,455.51
RP110132	UT Southwestern Medical Center	\$ 300,000.00	\$ 299,481.47	\$ 518.53
RP110153	Baylor College of Medicine	\$ 938,203.00	\$ 936,516.53	\$ 1,686.47
RP110165	University of Texas at San Antonio	\$ 199,906.00	\$ 194,760.03	\$ 5,145.97

AY 11 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP110166	UT M.D. Anderson Cancer Center	\$ 919,462.00	\$ 918,935.03	\$ 526.97
RP110172	Baylor College of Medicine	\$ 1,241,680.00	\$ 716,107.94	\$ 525,572.06
RP110178	UT M.D. Anderson Cancer Center	\$ 631,578.00	\$ 631,288.09	\$ 289.91
RP110183	UT M.D. Anderson Cancer Center	\$ 789,471.00	\$ 786,027.02	\$ 3,443.98
RP110187	Baylor College of Medicine	\$ 335,398.00	\$ 329,085.82	\$ 6,312.18
RP110189	Baylor College of Medicine	\$ 500,000.00	\$ 500,000.00	\$ -
RP110200	UT Health Science Center San Antonio	\$ 797,800.00	\$ 797,800.00	\$ -
RP110202	UT Health Science Center San Antonio	\$ 919,898.00	\$ 919,896.18	\$ 1.82
RP110223	UT Southwestern Medical Center	\$ 200,000.00	\$ 199,999.96	\$ 0.04
RP110248	UT M.D. Anderson Cancer Center	\$ 1,077,522.00	\$ 939,144.83	\$ 138,377.17
RP110252	UT M.D. Anderson Cancer Center	\$ 864,120.00	\$ 753,886.74	\$ 110,233.26
RP110262	Methodist Hospital Research Institute	\$ 1,499,996.00	\$ 1,472,442.77	\$ 27,553.23
RP110291	Baylor College of Medicine	\$ 200,000.00	\$ 164,220.48	\$ 35,779.52
RP110299	Univ of North Texas HSC Ft Worth	\$ 170,334.00	\$ 131,501.89	\$ 38,832.11
RP110319	UT M.D. Anderson Cancer Center	\$ 207,561.11	\$ 207,561.11	\$ -
RP110319	Baylor Research Institute	\$ 930,422.89	\$ 928,540.99	\$ 1,881.90
RP110322	UT M.D. Anderson Cancer Center	\$ 595,364.00	\$ 540,635.78	\$ 54,728.22
RP110324	UT M.D. Anderson Cancer Center	\$ 1,147,268.00	\$ 1,147,268.00	\$ -
RP110327	UT M.D. Anderson Cancer Center	\$ 614,952.00	\$ 567,815.86	\$ 47,136.14
RP110329	UT Southwestern Medical Center	\$ 1,163,545.00	\$ 1,094,112.84	\$ 69,432.16
RP110330	UT Southwestern Medical Center	\$ 200,000.00	\$ 188,835.18	\$ 11,164.82
RP110349	Texas AgriLife Research	\$ 200,000.00	\$ 166,946.20	\$ 33,053.80
RP110355	University of Houston	\$ 199,977.00	\$ 199,139.49	\$ 837.51
RP110360	University of Houston	\$ 402,355.00	\$ 397,224.84	\$ 36,709.16
RP110363	University of North Texas	\$ 200,000.00	\$ 192,838.41	\$ 7,161.59
RP110383	UT Southwestern Medical Center	\$ 1,211,342.00	\$ 1,211,342.00	\$ 0.00
RP110390	Baylor College of Medicine	\$ 715,305.00	\$ 715,302.10	\$ 2.90
RP110394	UT Southwestern Medical Center	\$ 930,533.00	\$ 929,553.06	\$ 979.94
RP110395	UT Southwestern Medical Center	\$ 197,565.00	\$ 196,660.61	\$ 904.39
RP110405	UT Southwestern Medical Center	\$ 600,000.00	\$ 592,289.61	\$ 7,710.39
RP110412	University of Texas at Arlington	\$ 200,000.00	\$ 199,789.55	\$ 210.45
RP110430	UT Southwestern Medical Center	\$ 820,097.00	\$ 696,263.40	\$ 123,833.60
PP110154	The Rose	\$ 147,580.00	\$ 146,780.00	\$ 800.00
PP110156	Texas Tech University HSC El Paso	\$ 2,683,123.00	\$ 2,587,294.48	\$ 95,828.52
PP110163	UT Health Science Center Houston	\$ 583,561.00	\$ 571,781.63	\$ 11,779.37
PP110171	UT M.D. Anderson Cancer Center	\$ 298,890.00	\$ 229,881.99	\$ 69,008.01
PP110172	UT M.D. Anderson Cancer Center	\$ 211,406.00	\$ 185,293.23	\$ 26,112.77
PP110176	Texas A&M University System HSC	\$ 2,748,008.00	\$ 2,226,497.28	\$ 521,510.72
PP110178	Healthy Tarrant County Collaboration	\$ 212,535.00	\$ 172,515.27	\$ 40,019.73
PP110180	National Center for Farmworker Health	\$ 551,221.00	\$ 551,221.00	\$ -
PP110181	University of Texas at Austin	\$ 266,920.00	\$ 259,207.38	\$ 7,712.62
PP110187	UT Health Science Center San Antonio	\$ 265,469.00	\$ 265,416.53	\$ 52.47

AY 11 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
PP110190	Univ of North Texas HSC Ft Worth	\$ 1,388,146.00	\$ 1,373,676.47	\$ 14,469.53
PP110220	UT Southwestern Medical Center	\$ 1,597,535.00	\$ 1,490,478.31	\$ 107,056.69
PP110241	Texas A&M University System HSC	\$ 487,589.00	\$ 476,166.13	\$ 11,422.87
RP110508	Bellicum Pharmaceuticals	\$ 5,680,310.00	\$ 4,942,739.77	\$ 737,570.23
R1104	Baylor College of Medicine	\$ 2,000,000.00	\$ 1,995,662.72	\$ 4,337.28
R1106	University of Texas at Austin	\$ 2,000,000.00	\$ 1,986,396.44	\$ 13,603.56
R1107	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,974,984.41	\$ 25,015.59
R1108	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 1,995,656.31	\$ 4,343.69
R1109	UT Southwestern Medical Center	\$ 10,000,000.00	\$ 9,991,869.43	\$ 8,130.57
R1112	Methodist Hospital Research Institute	\$ 7,500,000.00	\$ 7,057,136.24	\$ 442,863.76
R1113	Methodist Hospital Research Institute	\$ 7,500,000.00	\$ 7,227,806.79	\$ 272,193.21
R1115	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,993,962.67	\$ 6,037.33
R1116	University of Texas at Austin	\$ 2,000,000.00	\$ 1,997,166.78	\$ 2,833.22
R1117	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,977,528.49	\$ 22,471.51
R1118	University of Texas at Austin	\$ 2,000,000.00	\$ 1,996,206.68	\$ 3,793.32
R1119	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,997,301.64	\$ 2,698.36
RP110441-AC	UT Southwestern Medical Center	\$ 232,138.34	\$ 232,138.34	\$ -
RP110441-AC	Texas A&M University System HSC	\$ 274,464.66	\$ 273,141.52	\$ 1,323.14
RP110441-C1	UT Southwestern Medical Center	\$ 859,684.00	\$ 859,275.10	\$ 408.90
RP110441-P1	UT Southwestern Medical Center	\$ 991,944.03	\$ 991,944.03	\$ -
RP110441-P1	Texas A&M University System HSC	\$ 592,723.97	\$ 592,535.47	\$ 188.50
RP110441-P2	UT Southwestern Medical Center	\$ 1,618,499.00	\$ 1,618,485.24	\$ 13.76
RP110441-P3	University of Texas at Dallas	\$ 651,710.14	\$ 651,710.14	\$ -
RP110441-P3	Texas A&M University HSC	\$ 768,641.86	\$ 767,122.01	\$ 1,519.85
RP110444-AC	University of Houston	\$ 383,428.00	\$ 383,419.09	\$ 8.91
RP110444-C1	University of Houston	\$ 1,051,402.00	\$ 1,051,401.99	\$ 0.01
RP110444-C2	Methodist Hospital Research Institute	\$ 495,285.00	\$ 494,893.27	\$ 391.73
RP110444-P1	University of Houston	\$ 1,150,497.00	\$ 1,150,497.00	\$ -
RP110444-P2	University of Texas at El Paso	\$ 999,992.00	\$ 978,448.96	\$ 21,543.04
RP110444-P3	Methodist Hospital Research Institute	\$ 1,080,084.00	\$ 1,079,239.32	\$ 844.68
RP110465-AC	UT Southwestern Medical Center	\$ 497,513.00	\$ 497,513.00	\$ -
RP110465-C2	University of Texas at Arlington	\$ 789,470.00	\$ 711,895.31	\$ 77,574.69
RP110465-P1	UT Southwestern Medical Center	\$ 1,397,131.00	\$ 1,396,774.95	\$ 356.05
RP110465-P2	UT M.D. Anderson Cancer Center	\$ 1,315,785.00	\$ 1,315,234.59	\$ 550.41
RP110465-P3	UT Southwestern Medical Center	\$ 1,397,139.00	\$ 1,385,065.72	\$ 12,073.28
RP110465-P4	University of Texas at Austin	\$ 1,052,630.00	\$ 1,049,808.34	\$ 2,821.66
RP110471-AC	UT M.D. Anderson Cancer Center	\$ 298,105.00	\$ 211,824.79	\$ 86,280.21
RP110471-C1	UT M.D. Anderson Cancer Center	\$ 1,025,000.00	\$ 1,023,319.43	\$ 1,680.57
RP110471-C2	UT M.D. Anderson Cancer Center	\$ 843,999.00	\$ 833,747.33	\$ 10,251.67
RP110471-C3	Baylor College of Medicine	\$ 1,158,522.00	\$ 1,135,515.51	\$ 23,006.49
RP110471-P1	UT M.D. Anderson Cancer Center	\$ 3,531,260.00	\$ 3,512,481.69	\$ 18,778.31
RP110471-P2	UT M.D. Anderson Cancer Center	\$ 2,256,383.00	\$ 2,254,221.57	\$ 2,161.43

AY 11 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP110471-P3	Baylor College of Medicine	\$ 1,488,764.00	\$ 1,479,821.48	\$ 8,942.52
RP110486-AC	UT Southwestern Medical Center	\$ 390,840.00	\$ 305,186.17	\$ 85,653.83
RP110486-P1	UT M.D. Anderson Cancer Center	\$ 1,842,105.00	\$ 1,834,924.48	\$ 7,180.52
RP110486-P2	UT Southwestern Medical Center	\$ 1,500,000.00	\$ 1,499,953.24	\$ 46.76
RP110486-P3	UT Southwestern Medical Center	\$ 1,500,000.00	\$ 1,491,342.50	\$ 8,657.50
RP110486-P5	UT Southwestern Medical Center	\$ 1,315,785.00	\$ 1,297,998.61	\$ 17,786.39
RP110524	UT Health Science Center San Antonio	\$ 741,446.00	\$ 741,376.79	\$ 69.21
RP110532-AC	UT Health Science Center Houston	\$ 105,914.28	\$ 105,914.28	\$ -
RP110532-AC	TAMUS HSC (Insti Bio Science)	\$ 2,373,435.72	\$ 2,278,561.69	\$ 94,874.03
RP110532-C1	Methodist Hospital Research Institute	\$ 1,949,151.00	\$ 1,489,838.86	\$ 459,312.14
RP110532-C2	Rice University	\$ 824,769.00	\$ 794,755.20	\$ 31,735.80
RP110532-P1	University of Texas at Austin	\$ 2,380,464.00	\$ 2,374,996.94	\$ 5,467.06
RP110532-P2	UT Health Science Center Houston	\$ 132,168.95	\$ 132,168.95	\$ -
RP110532-P2	TAMUS HSC (Insti Bio Science)	\$ 3,733,053.05	\$ 3,718,199.52	\$ 14,853.53
RP110532-P3	UT M.D. Anderson Cancer Center	\$ 1,114,249.00	\$ 1,113,880.03	\$ 368.97
RP110545	Baylor College of Medicine	\$ 698,992.00	\$ 698,972.70	\$ 19.30
RP110553-AC	Baylor College of Medicine	\$ 536,371.00	\$ 415,747.87	\$ 120,623.13
RP110553-C1	Baylor College of Medicine	\$ 1,572,036.00	\$ 1,005,835.46	\$ 566,200.54
RP110553-C2	Baylor College of Medicine	\$ 2,693,942.00	\$ 2,135,435.24	\$ 558,506.76
RP110553-C3	Baylor Research Institute	\$ 390,183.00	\$ 100,653.39	\$ 289,529.61
RP110553-P1	Baylor College of Medicine	\$ 1,227,857.00	\$ 1,223,130.53	\$ 4,726.47
RP110553-P2	Baylor College of Medicine	\$ 100,000.00	\$ 55,028.26	\$ 44,971.74
RP110553-P3	UT M.D. Anderson Cancer Center	\$ 1,625,600.00	\$ 1,426,269.87	\$ 199,330.13
RP110553-P4	UT M.D. Anderson Cancer Center	\$ 2,037,084.00	\$ 1,696,828.87	\$ 340,255.13
RP110553-P5	Baylor Research Institute	\$ 1,717,997.00	\$ 1,307,987.86	\$ 410,009.14
RP110555	TAMUS HSC Research Foundation	\$ 798,945.00	\$ 798,931.56	\$ 13.44
RP110562-AC	UT Southwestern Medical Center	\$ 595,713.00	\$ 565,052.10	\$ 30,660.90
RP110562-C1	UT Southwestern Medical Center	\$ 588,474.00	\$ 581,766.43	\$ 6,707.57
RP110562-C2	UT M.D. Anderson Cancer Center	\$ 840,699.00	\$ 838,967.79	\$ 1,731.21
RP110562-P1	UT Southwestern Medical Center	\$ 2,356,538.00	\$ 2,353,333.27	\$ 3,204.73
RP110562-P2	UT M.D. Anderson Cancer Center	\$ 1,558,477.00	\$ 1,553,380.63	\$ 5,096.37
RP110584	UT M.D. Anderson Cancer Center	\$ 830,765.00	\$ 825,668.32	\$ 5,096.68
RP110595-AC	UT M.D. Anderson Cancer Center	\$ 275,259.00	\$ 227,214.85	\$ 48,044.15
RP110595-C1	UT M.D. Anderson Cancer Center	\$ 829,285.00	\$ 829,284.98	\$ 0.02
RP110595-C2	UT M.D. Anderson Cancer Center	\$ 558,852.00	\$ 558,852.00	\$ -
RP110595-P1	UT M.D. Anderson Cancer Center	\$ 1,388,805.00	\$ 1,383,443.58	\$ 5,361.42
RP110595-P2	UT M.D. Anderson Cancer Center	\$ 1,516,026.00	\$ 1,516,024.12	\$ 1.88
RP110595-P3	UT Southwestern Medical Center	\$ 1,397,137.00	\$ 1,397,124.11	\$ 12.89
RP110609	UT M.D. Anderson Cancer Center	\$ 723,246.00	\$ 721,410.78	\$ 1,835.22
RP110708-AC	UT Southwestern Medical Center	\$ 658,755.00	\$ 658,752.16	\$ 2.84
RP110708-C1	Baylor College of Medicine	\$ 2,022,424.00	\$ 1,996,239.38	\$ 26,184.62
RP110708-C2	UT Southwestern Medical Center	\$ 2,206,362.00	\$ 2,206,169.54	\$ 192.46

AY 11 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP110708-C3	UT Southwestern Medical Center	\$ 1,315,786.00	\$ 1,315,631.76	\$ 154.24
RP110708-P1	UT Southwestern Medical Center	\$ 1,972,269.00	\$ 1,968,434.17	\$ 3,834.83
RP110708-P2	UT Southwestern Medical Center	\$ 2,845,411.00	\$ 2,844,056.82	\$ 1,354.18
RP110708-P3	UT Southwestern Medical Center	\$ 1,998,363.00	\$ 1,996,306.02	\$ 2,056.98
RP110763-AC	Texas Tech University HSC	\$ 261,482.00	\$ 205,463.67	\$ 56,018.33
RP110763-C1	Texas Tech University HSC	\$ 791,473.00	\$ 791,123.63	\$ 349.37
RP110763-P1	UT Southwestern Medical Center	\$ 750,514.00	\$ 750,394.65	\$ 119.35
RP110763-P3	Texas Tech University HSC	\$ 913,931.00	\$ 913,915.85	\$ 15.15
RP110771	UT Southwestern Medical Center	\$ 4,200,000.00	\$ 4,192,861.14	\$ 7,138.86
RP110776	UT Health Science Center Houston	\$ 598,472.00	\$ 598,471.73	\$ 0.27
RP110782	University of Texas at Austin	\$ 1,302,789.00	\$ 1,302,773.54	\$ 15.46
RP110784	Baylor College of Medicine	\$ 2,440,429.00	\$ 2,440,409.89	\$ 19.11
RP110786	Texas Tech University HSC	\$ 928,916.00	\$ 928,916.00	\$ -
	Grand Total	\$ 210,547,984.00	\$ 201,590,140.89	\$ 8,991,144.11

AY 12 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
PP120029	Texas Dept of State Health Services	\$ 2,936,382.00	\$ 2,925,409.43	\$ 10,972.57
PP120040	The Rose	\$ 2,699,846.00	\$ 2,682,974.35	\$ 16,871.65
PP120050	UT Health Science Center San Antonio	\$ 1,996,034.00	\$ 1,976,599.53	\$ 19,434.47
PP120059	Centro San Vicente	\$ 1,937,461.00	\$ 1,103,045.55	\$ 834,415.45
PP120086	UT Health Science Center Houston	\$ 2,699,988.00	\$ 2,657,923.85	\$ 42,064.15
PP120089	UT Health Science Center San Antonio	\$ 2,712,654.00	\$ 2,630,123.52	\$ 82,530.48
PP120091	Baylor College of Medicine	\$ 1,613,612.00	\$ 1,365,352.09	\$ 248,259.91
PP120097	UT Southwestern Medical Center	\$ 2,699,886.00	\$ 2,697,266.74	\$ 2,619.26
PP120099	Texas AgriLife Extension Service	\$ 2,698,705.00	\$ 2,623,932.52	\$ 74,772.48
PP120100	Light and Salt Association	\$ 329,933.00	\$ 329,933.00	\$ -
PP120108	Angelo State University	\$ 1,120,825.00	\$ 954,534.82	\$ 166,290.18
PP120111	University Health System	\$ 2,861,574.00	\$ 2,005,705.76	\$ 855,868.24
PP120177	Texas Nurses Foundation	\$ 376,087.00	\$ 282,707.26	\$ 93,379.74
PP120229	UT Southwestern Medical Center	\$ 2,249,851.00	\$ 2,249,851.00	\$ -
CC121004	Caliber Biotherapeutics LLC	\$ 7,097,631.00	\$ 2,181,751.81	\$ 4,915,879.19
CP120014	Pulmotect Inc	\$ 7,126,398.00	\$ 7,119,258.00	\$ 7,140.00
CP120017	Asuragen Inc	\$ 6,837,265.00	\$ 6,837,265.00	\$ -
CP120036	Cell Medica Inc.	\$ 15,571,303.00	\$ 15,571,302.00	\$ 1.00
CP120038	FujiFilm Diosynth Biotechnologies Texas LLC	\$ 7,901,420.00	\$ 5,645,188.05	\$ 2,256,231.95
CP121020	Molecular Templates Inc	\$ 10,600,000.00	\$ 10,600,000.00	\$ -
R1110	Rice University	\$ 6,000,000.00	\$ 5,999,998.33	\$ 1.67
R1111	Rice University	\$ 4,000,000.00	\$ 3,999,628.28	\$ 371.72
R1120	University of Texas at Austin	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
R1121	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,996,155.33	\$ 3,844.67
R1122	UT Medical Branch at Galveston	\$ 1,881,402.00	\$ 1,881,338.08	\$ 63.92
R1201	Baylor College of Medicine	\$ 2,000,000.00	\$ 1,850,239.22	\$ 149,760.78
R1202	University of Texas at Austin	\$ 2,000,000.00	\$ 1,836,442.76	\$ 163,557.24
R1203	UT M.D. Anderson Cancer Center	\$ 10,000,000.00	\$ 10,000,000.00	\$ -
R1204	UT M.D. Anderson Cancer Center	\$ 5,000,000.00	\$ 3,999,998.18	\$ 1,000,001.82
R1205	UT M.D. Anderson Cancer Center	\$ 7,000,000.00	\$ 6,920,632.50	\$ 79,367.50
R1207	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,999,971.80	\$ 28.20
R1208	UT Southwestern Medical Center	\$ 900,000.00	\$ 871,081.72	\$ 28,918.28
R1209	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,999,964.38	\$ 35.62
R1212	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,999,968.95	\$ 31.05
R1213	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
R1214	University of Texas at Austin	\$ 2,000,000.00	\$ 1,951,218.21	\$ 48,781.79
R1215	UT Health Science Center Houston	\$ 2,000,000.00	\$ 1,999,490.90	\$ 509.10
R1221	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
R1222	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,997,009.04	\$ 2,990.96
R1223	Baylor College of Medicine	\$ 4,500,000.00	\$ 4,496,010.81	\$ 3,989.19
RP120016	UT Southwestern Medical Center	\$ 200,000.00	\$ 170,507.62	\$ 29,492.38
RP120028	Texas AgriLife Research	\$ 199,999.00	\$ 199,011.77	\$ 987.23

AY 12 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP120046	Baylor College of Medicine	\$ 803,179.00	\$ 803,155.90	\$ 23.10
RP120052	University of Texas at Arlington	\$ 1,095,905.00	\$ 1,093,367.03	\$ 2,537.97
RP120053	Texas Tech University	\$ 199,994.00	\$ 199,571.51	\$ 422.49
RP120076	Baylor College of Medicine	\$ 937,896.00	\$ 937,482.43	\$ 413.57
RP120092	Baylor College of Medicine	\$ 6,000,000.00	\$ 5,997,407.12	\$ 2,592.88
RP120093	UT Southwestern Medical Center	\$ 200,000.00	\$ 181,574.05	\$ 18,425.95
RP120094	UT Southwestern Medical Center	\$ 965,257.00	\$ 964,850.57	\$ 406.43
RP120108	UT M.D. Anderson Cancer Center	\$ 1,378,796.00	\$ 1,357,908.94	\$ 20,887.06
RP120124	UT M.D. Anderson Cancer Center	\$ 1,137,202.00	\$ 1,133,171.63	\$ 4,030.37
RP120138	Baylor College of Medicine	\$ 1,214,977.00	\$ 1,209,610.43	\$ 5,366.57
RP120168	Texas Tech University HSC (Abilene)	\$ 756,644.00	\$ 756,495.65	\$ 148.35
RP120190	UT Health Science Center San Antonio	\$ 199,902.00	\$ 199,878.63	\$ 23.37
RP120194	University of Texas at Austin	\$ 1,125,799.00	\$ 1,125,528.21	\$ 270.79
RP120214	UT M.D. Anderson Cancer Center	\$ 1,379,098.00	\$ 1,378,936.87	\$ 161.13
RP120217	UT M.D. Anderson Cancer Center	\$ 1,285,789.00	\$ 1,101,341.27	\$ 184,447.73
RP120241	UT M.D. Anderson Cancer Center	\$ 1,359,672.00	\$ 1,343,626.69	\$ 16,045.31
RP120256	UT M.D. Anderson Cancer Center	\$ 1,000,179.00	\$ 918,406.28	\$ 81,772.72
RP120258	UT M.D. Anderson Cancer Center	\$ 1,139,807.00	\$ 1,137,782.30	\$ 2,024.70
RP120262	UT Southwestern Medical Center	\$ 1,499,532.00	\$ 1,476,189.08	\$ 23,342.92
RP120280	UT M.D. Anderson Cancer Center	\$ 790,550.00	\$ 790,246.98	\$ 303.02
RP120290	UT Health Science Center San Antonio	\$ 884,089.00	\$ 881,008.50	\$ 3,080.50
RP120298	Baylor College of Medicine	\$ 905,975.00	\$ 817,956.09	\$ 88,018.91
RP120307	UT Southwestern Medical Center	\$ 1,002,052.00	\$ 999,963.22	\$ 2,088.78
RP120311	UT Southwestern Medical Center	\$ 631,578.00	\$ 579,038.92	\$ 52,539.08
RP120314	University of Texas at Austin	\$ 200,000.00	\$ 172,894.36	\$ 27,105.64
RP120316	UT M.D. Anderson Cancer Center	\$ 915,974.00	\$ 913,485.32	\$ 2,488.68
RP120326	UT M.D. Anderson Cancer Center	\$ 1,271,284.00	\$ 1,189,218.42	\$ 82,065.58
RP120340	UT Southwestern Medical Center	\$ 200,000.00	\$ 200,000.00	\$ -
RP120343	University of Texas at Austin	\$ 659,495.00	\$ 659,495.00	\$ -
RP120348	UT M.D. Anderson Cancer Center	\$ 5,995,917.00	\$ 5,869,695.75	\$ 126,221.25
RP120352	UT Southwestern Medical Center	\$ 684,209.00	\$ 683,114.44	\$ 1,094.56
RP120372	UT Health Science Center San Antonio	\$ 200,000.00	\$ 200,000.00	\$ -
RP120380	UT M.D. Anderson Cancer Center	\$ 750,000.00	\$ 749,040.31	\$ 959.69
RP120390	UT M.D. Anderson Cancer Center	\$ 727,029.00	\$ 727,028.29	\$ 0.71
RP120393	University of Texas at Austin	\$ 1,275,000.00	\$ 1,150,465.94	\$ 124,534.06
RP120394	UT M.D. Anderson Cancer Center	\$ 664,248.00	\$ 663,768.58	\$ 479.42
RP120406	University of Texas at Austin	\$ 1,010,289.00	\$ 1,006,085.60	\$ 4,203.40
RP120408	UT M.D. Anderson Cancer Center	\$ 913,322.00	\$ 882,056.59	\$ 31,265.41
RP120422	Texas Tech University HSC (Amarillo)	\$ -	\$ -	\$ -
RP120429	Texas Engineering Exp Station (TEES)	\$ 200,000.00	\$ 199,669.13	\$ 330.87
RP120451	UT M.D. Anderson Cancer Center	\$ 864,748.00	\$ 864,197.05	\$ 550.95
RP120459	University of Texas at Austin	\$ 947,367.00	\$ 946,164.81	\$ 1,202.19

AY 12 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP120462	UT Health Science Center San Antonio	\$ 767,107.00	\$ 764,402.83	\$ 2,704.17
RP120474	UT Southwestern Medical Center	\$ 681,709.00	\$ 670,238.19	\$ 11,470.81
RP120489	Texas Tech University HSC (Amarillo)	\$ 736,685.00	\$ 736,535.56	\$ 149.44
RP120495	Texas Tech University HSC (Dallas)	\$ 2,500,000.00	\$ 2,427,433.81	\$ 72,566.19
RP120505	UT M.D. Anderson Cancer Center	\$ 1,016,800.00	\$ 698,890.67	\$ 317,909.33
RP120507	University of Texas at Austin	\$ 199,127.00	\$ 198,257.59	\$ 1,669.41
RP120510	Scott & White Healthcare	\$ 3,584,521.00	\$ 3,563,059.40	\$ 21,461.60
RP120528	Texas Tech University HSC El Paso	\$ 1,500,000.00	\$ 1,499,973.88	\$ 26.12
RP120558	University of Texas at San Antonio	\$ 698,120.00	\$ 673,137.50	\$ 24,982.50
RP120572	University of Texas at Arlington	\$ 200,000.00	\$ 198,390.02	\$ 1,609.98
RP120583	Baylor College of Medicine	\$ 1,102,029.00	\$ 1,101,269.32	\$ 759.68
RP120588	University of Texas at Dallas	\$ 1,259,790.00	\$ 1,224,541.90	\$ 35,248.10
RP120611	UT Medical Branch at Galveston	\$ 578,204.00	\$ 532,512.32	\$ 45,691.68
RP120613	UT Southwestern Medical Center	\$ 4,400,000.00	\$ 4,389,442.15	\$ 10,557.85
RP120617	University of Houston	\$ 990,286.00	\$ 990,284.00	\$ 2.00
RP120670-AC	UT Southwestern Medical Center	\$ 323,348.63	\$ 322,552.58	\$ 796.05
RP120670-C1	UT Southwestern Medical Center	\$ 269,129.00	\$ 231,617.40	\$ 37,511.60
RP120670-C3	UT Southwestern Medical Center	\$ 887,912.00	\$ 887,746.40	\$ 165.60
RP120670-P3	UT Southwestern Medical Center	\$ 1,298,237.00	\$ 1,297,022.16	\$ 1,214.84
RP120670-P4	UT Southwestern Medical Center	\$ 1,353,233.00	\$ 1,352,995.37	\$ 237.63
RP120685-AC	UT Southwestern Medical Center	\$ 666,202.00	\$ 609,643.15	\$ 56,558.85
RP120685-C1	UT Southwestern Medical Center	\$ 848,328.00	\$ 755,006.29	\$ 93,321.71
RP120685-C2	UT Health Science Center San Antonio	\$ 816,645.00	\$ 812,871.70	\$ 3,773.30
RP120685-P1	Baylor College of Medicine	\$ 1,478,447.00	\$ 1,363,120.54	\$ 115,326.46
RP120685-P2	UT Southwestern Medical Center	\$ 1,381,464.00	\$ 1,379,370.02	\$ 2,093.98
RP120685-P3	UT Southwestern Medical Center	\$ 1,727,162.00	\$ 1,702,209.51	\$ 24,952.49
RP120713-AC	UT M.D. Anderson Cancer Center	\$ 530,913.00	\$ 503,411.89	\$ 27,501.11
RP120713-C2	Baylor College of Medicine	\$ 556,969.00	\$ 556,857.09	\$ 111.91
RP120713-C3	UT M.D. Anderson Cancer Center	\$ 530,913.00	\$ 525,990.20	\$ 4,922.80
RP120713-P1	UT M.D. Anderson Cancer Center	\$ 1,300,007.00	\$ 1,297,739.05	\$ 2,267.95
RP120713-P2	Rice University	\$ 1,395,844.00	\$ 1,395,844.00	\$ -
RP120713-P3	Baylor College of Medicine	\$ 1,061,827.00	\$ 1,059,368.59	\$ 2,458.41
RP120715-AC	UT Health Science Center San Antonio	\$ 80,832.00	\$ 80,296.79	\$ 535.21
RP120715-C2	Baylor College of Medicine	\$ 42,106.00	\$ 42,041.59	\$ 64.41
RP120715-C4	UT Health Science Center San Antonio	\$ 252,964.00	\$ 225,293.51	\$ 27,670.49
RP120715-P2	Baylor College of Medicine	\$ 142,200.00	\$ 142,195.73	\$ 4.27
RP120717-AC	UT Southwestern Medical Center	\$ 234,865.00	\$ 225,373.95	\$ 9,491.05
RP120717-C1	UT Southwestern Medical Center	\$ 1,049,969.00	\$ 1,049,868.61	\$ 100.39
RP120717-P1	UT Southwestern Medical Center	\$ 1,046,080.00	\$ 964,559.17	\$ 81,520.83
RP120717-P2	UT Southwestern Medical Center	\$ 1,394,990.00	\$ 1,392,882.89	\$ 2,107.11
RP120717-P3	UT Southwestern Medical Center	\$ 1,315,785.00	\$ 1,314,041.88	\$ 1,743.12
RP120717-P4	University of Texas at Dallas	\$ 1,315,785.00	\$ 1,297,191.87	\$ 18,593.13

AY 12 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP120718-AC	UT Southwestern Medical Center	\$ 394,735.00	\$ 393,937.76	\$ 797.24
RP120718-C1	UT Southwestern Medical Center	\$ 1,049,850.00	\$ 1,049,669.30	\$ 180.70
RP120718-C2	UT Southwestern Medical Center	\$ 1,766,633.00	\$ 1,764,695.43	\$ 1,937.57
RP120718-P1	UT Southwestern Medical Center	\$ 1,576,248.00	\$ 1,575,993.56	\$ 254.44
RP120718-P2	UT Southwestern Medical Center	\$ 1,578,945.00	\$ 1,578,040.10	\$ 904.90
RP120718-P3	UT Southwestern Medical Center	\$ 1,556,413.00	\$ 1,550,336.77	\$ 6,076.23
RP120727	UT M.D. Anderson Cancer Center	\$ 999,872.00	\$ 999,858.49	\$ 13.51
RP120732-AC	UT Southwestern Medical Center	\$ 280,715.00	\$ 280,715.00	\$ -
RP120732-C1	UT M.D. Anderson Cancer Center	\$ 775,000.00	\$ 769,794.03	\$ 5,205.97
RP120732-C2	UT Southwestern Medical Center	\$ 749,940.00	\$ 698,252.96	\$ 51,687.04
RP120732-P1	UT Southwestern Medical Center	\$ 2,057,580.00	\$ 2,057,471.47	\$ 108.53
RP120732-P2	Baylor College of Medicine	\$ 1,397,662.00	\$ 1,397,641.16	\$ 20.84
RP120732-P3	UT Southwestern Medical Center	\$ 800,020.00	\$ 792,257.32	\$ 7,762.68
RP120732-P4	Baylor College of Medicine	\$ 955,045.00	\$ 955,017.68	\$ 27.32
RP120732-P5	Baylor College of Medicine	\$ 1,200,000.00	\$ 1,199,964.01	\$ 35.99
RP120777	UT M.D. Anderson Cancer Center	\$ 778,431.00	\$ 778,303.18	\$ 127.82
RP120840	UT Southwestern Medical Center	\$ 851,490.00	\$ 851,445.15	\$ 44.85
RP120855	Texas A&M University SystemHSC	\$ 1,455,000.00	\$ 1,419,248.26	\$ 35,751.74
RP120867	UT Health Science Center San Antonio	\$ 1,082,063.00	\$ 1,082,063.00	\$ -
RP120880	UT M.D. Anderson Cancer Center	\$ 999,999.00	\$ 473,297.93	\$ 526,701.07
RP120897	UT Southwestern Medical Center	\$ 999,597.00	\$ 999,593.46	\$ 3.54
RP120941	UT Health Science Center Houston	\$ 605,425.00	\$ 605,425.00	\$ (0.00)
RP120960	UT Southwestern Medical Center	\$ 1,215,000.00	\$ 1,211,862.00	\$ 3,138.00
RP120997	UT M.D. Anderson Cancer Center	\$ 659,675.00	\$ 614,978.29	\$ 44,696.71
RP121002	Texas A&M University	\$ 777,884.00	\$ 777,507.71	\$ 376.29
RP121010	UT M.D. Anderson Cancer Center	\$ 1,223,725.00	\$ 1,222,842.47	\$ 882.53
RP121018	Baylor College of Medicine	\$ 996,815.00	\$ 996,808.36	\$ 6.64
RP121035	Baylor College of Medicine	\$ 1,023,174.00	\$ 1,023,144.04	\$ 29.96
RP121048	Methodist Hospital Research Institute	\$ 904,131.00	\$ 903,776.39	\$ 354.61
RP121060	Texas Tech University HSC	\$ 1,000,000.00	\$ 887,002.42	\$ 112,997.58
RP121071	Methodist Hospital Research Institute	\$ 999,834.00	\$ 999,824.52	\$ 9.48
	Grand Total	\$269,348,445.63	\$255,378,740.98	\$ 13,913,327.28

AY 13 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
PP120143	Asian American Health Coalition, dba Hope Clinic	\$ 196,611.00	\$ 186,727.25	\$ 9,883.75
PP120150	UT Medical Branch at Galveston	\$ 1,224,025.00	\$ 1,223,344.97	\$ 680.03
PP120167	UT Health Science Center at San Antonio	\$ 499,907.00	\$ 450,230.82	\$ 49,676.18
PP120188	Methodist Dallas Medical Center	\$ 599,574.00	\$ 236,245.90	\$ 363,328.10
PP120191	UT M.D. Anderson Cancer Center	\$ 800,000.00	\$ 761,390.55	\$ 38,609.45
PP120198	Mercy Ministries of Laredo	\$ 308,579.00	\$ 308,579.00	\$ -
PP120207	UT M.D. Anderson Cancer Center	\$ 1,354,029.00	\$ 200,173.84	\$ 1,153,855.16
PP120211	Cancer and Chronic Disease Consortium	\$ 2,177,340.00	\$ 2,167,057.87	\$ 10,282.13
PP120213	University of North Texas Health Science Center at Fort Worth	\$ 2,068,621.00	\$ 1,825,269.48	\$ 243,351.52
PP120216	MHMR of Tarrant County	\$ 2,247,972.00	\$ 2,120,781.52	\$ 127,190.48
PP120217	University Health System	\$ 1,750,000.00	\$ 1,747,800.18	\$ 2,199.82
PP120225	Livestrong	\$ 350,000.00	\$ 301,717.55	\$ 48,282.45
R1216	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,998,526.20	\$ 1,473.80
R1218	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 1,995,637.91	\$ 4,362.09
R1219	UT Health Science Center at San Antonio	\$ 1,892,800.00	\$ 1,892,751.93	\$ 48.07
R1220	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
R1225	UT Southwestern Medical Center	\$ 5,000,000.00	\$ 4,989,340.26	\$ 10,659.74
R1226	Rice University	\$ 6,000,000.00	\$ 5,999,999.97	\$ 0.03
R1227	UT M.D. Anderson Cancer Center	\$ 3,500,000.00	\$ 3,499,999.99	\$ 0.01
R1301	UT M.D. Anderson Cancer Center	\$ 3,000,000.00	\$ 2,992,969.27	\$ 7,030.73
R1304	Baylor College of Medicine	\$ 2,000,000.00	\$ 1,999,361.53	\$ 638.47
R1306	Baylor College of Medicine	\$ 2,000,000.00	\$ 1,999,770.74	\$ 229.26
R1307	UT Health Science Center at Houston	\$ 2,806,000.00	\$ 2,790,331.60	\$ 15,668.40
R1308	UT Southwestern Medical Center	\$ 2,425,000.00	\$ 2,408,782.78	\$ 16,217.22
R1309	Baylor University	\$ 4,215,750.00	\$ 4,199,759.04	\$ 15,990.96
RP130020	UT M.D. Anderson Cancer Center	\$ 826,196.00	\$ 826,196.00	\$ -
RP130051	UT Health Science Center at Houston	\$ 435,049.00	\$ 434,668.17	\$ 380.83
RP130054	UT M.D. Anderson Cancer Center	\$ 1,452,982.00	\$ 1,452,969.11	\$ 12.89
RP130059	UT Health Science Center at Houston	\$ 1,050,000.00	\$ 1,049,997.77	\$ 2.23
RP130078	UT M.D. Anderson Cancer Center	\$ 802,933.00	\$ 800,751.00	\$ 2,182.00
RP130090	UT M.D. Anderson Cancer Center	\$ 484,412.00	\$ 465,855.71	\$ 18,556.29
RP130109	UT Southwestern Medical Center	\$ 676,134.00	\$ 674,849.76	\$ 1,284.24
RP130123	UT M.D. Anderson Cancer Center	\$ 1,241,316.00	\$ 1,241,315.97	\$ 0.03
RP130124	University of Texas at Austin	\$ 260,633.00	\$ 233,672.46	\$ 26,960.54
RP130135	Baylor College of Medicine	\$ 199,994.00	\$ 198,017.47	\$ 1,976.53
RP130145	UT Southwestern Medical Center	\$ 1,081,815.00	\$ 617,197.49	\$ 464,617.51
RP130166	UT Southwestern Medical Center	\$ 200,000.00	\$ 199,908.85	\$ 91.15
RP130172	UT Southwestern Medical Center	\$ 199,994.00	\$ 199,837.00	\$ 157.00
RP130189	UT Southwestern Medical Center	\$ 400,000.00	\$ 398,286.52	\$ 1,713.48
RP130212	UT Southwestern Medical Center	\$ 1,389,624.00	\$ 1,384,004.60	\$ 5,619.40
RP130219	University of Texas at Austin	\$ 955,094.00	\$ 943,830.39	\$ 11,263.61
RP130256	Baylor College of Medicine	\$ 5,300,000.00	\$ 4,361,878.92	\$ 938,121.08
RP130258	UT Southwestern Medical Center	\$ 39,978.47	\$ 39,978.47	\$ -
RP130258	University of Houston	\$ 735,636.53	\$ 735,627.24	\$ 9.29
RP130266	Texas Tech University Health Sciences Center	\$ 777,268.00	\$ 752,342.81	\$ 24,925.19
RP130272	UT Southwestern Medical Center	\$ 665,559.00	\$ 662,276.66	\$ 3,282.34
RP130276	UT M.D. Anderson Cancer Center	\$ 929,920.00	\$ 916,159.74	\$ 13,760.26
RP130293	Texas Tech University	\$ 199,910.00	\$ 199,905.44	\$ 4.56
RP130297	UT M.D. Anderson Cancer Center	\$ 450,000.00	\$ 449,943.76	\$ 56.24

AY 13 Grant Activity

Grant Number	Entity	Grant Award Budget	Grant Award Expenses	Grant Remaining Balance
RP130310	UT M.D. Anderson Cancer Center	\$ 788,915.00	\$ 782,510.02	\$ 6,404.98
RP130312	UT Southwestern Medical Center	\$ 199,688.00	\$ 176,354.68	\$ 23,333.32
RP130315	Baylor College of Medicine	\$ 750,000.00	\$ 719,385.99	\$ 30,614.01
RP130362	UT Southwestern Medical Center	\$ 1,247,260.00	\$ 1,240,642.18	\$ 6,617.82
RP130368	Baylor College of Medicine	\$ 1,189,121.00	\$ 713,732.72	\$ 475,388.28
RP130372	University of Texas at Austin	\$ 837,947.00	\$ 837,002.58	\$ 944.42
RP130389	UT M.D. Anderson Cancer Center	\$ 199,639.00	\$ 199,639.00	\$ -
RP130397	UT M.D. Anderson Cancer Center	\$ 4,500,000.00	\$ 4,497,768.28	\$ 2,231.72
RP130409	UT Southwestern Medical Center	\$ 812,295.30	\$ 810,273.46	\$ 2,021.84
RP130412	University of Texas at Austin	\$ 1,246,931.00	\$ 1,244,165.63	\$ 2,765.37
RP130425	UT Health Science Center at Houston	\$ 200,000.00	\$ 199,981.09	\$ 18.91
RP130427	UT Southwestern Medical Center	\$ 983,505.00	\$ 983,487.60	\$ 17.40
RP130432	UT M.D. Anderson Cancer Center	\$ 1,940,486.00	\$ 1,925,445.10	\$ 15,040.90
RP130455	Rice University	\$ 199,999.00	\$ 199,999.00	\$ -
RP130459	UT Health Science Center at Houston	\$ 1,496,029.00	\$ 1,489,078.46	\$ 6,950.54
RP130464	UT Southwestern Medical Center	\$ 785,018.00	\$ 784,755.77	\$ 262.23
RP130485	Baylor College of Medicine	\$ 845,929.00	\$ 758,870.23	\$ 87,058.77
RP130502	UT M.D. Anderson Cancer Center	\$ 1,362,467.00	\$ 1,360,646.57	\$ 1,820.43
RP130513	UT Southwestern Medical Center	\$ 1,433,257.00	\$ 1,433,244.19	\$ 12.81
RP130515	UT Southwestern Medical Center	\$ 199,472.00	\$ 197,912.75	\$ 1,559.25
RP130516	UT M.D. Anderson Cancer Center	\$ 1,262,675.00	\$ 921,164.23	\$ 341,510.77
RP130533	Rice University	\$ 200,000.00	\$ 199,999.68	\$ 0.32
RP130547	Texas Tech University Health Sciences Center	\$ 821,051.00	\$ 821,040.30	\$ 10.70
RP130548	UT Health Science Center at San Antonio	\$ 755,718.00	\$ 755,718.00	\$ -
RP130553	University of Houston	\$ 1,215,650.00	\$ 1,215,649.97	\$ 0.03
RP130570	University of Houston	\$ 1,279,584.00	\$ 1,279,584.00	\$ -
RP130573	Baylor College of Medicine	\$ 1,357,896.00	\$ 1,357,864.30	\$ 31.70
RP130588	Baylor College of Medicine	\$ 1,509,802.00	\$ 1,498,984.23	\$ 10,817.77
RP130597	University of North Texas	\$ 181,419.00	\$ 181,145.20	\$ 273.80
RP130603	UT Southwestern Medical Center	\$ 1,205,451.00	\$ 1,205,451.00	\$ -
RP130604	Texas A&M University	\$ 199,997.00	\$ 198,098.65	\$ 1,898.35
RP130607	UT Southwestern Medical Center	\$ 846,522.00	\$ 846,126.29	\$ 395.71
RP130624	Texas Tech University	\$ 1,226,370.00	\$ 1,220,812.16	\$ 5,557.84
RP130629	UT Southwestern Medical Center	\$ 1,050,000.00	\$ 1,049,752.66	\$ 247.34
RP130639	Texas AgriLife Research	\$ 199,912.00	\$ 196,938.33	\$ 2,973.67
RP130651	Baylor College of Medicine	\$ 579,578.00	\$ 579,064.85	\$ 513.15
RP130660	Texas A&M University	\$ 198,295.00	\$ 198,293.82	\$ 1.18
RP130702	University of Texas at Austin	\$ 1,242,100.00	\$ 1,242,097.00	\$ 3.00
	Grand Total	\$ 109,720,626.90	\$ 105,058,701.43	\$ 4,661,932.87

AY 14 Grant Activity

Grant Number	Entity	Grant Award	Grant Expenses	Grant Remaining Balance
PP130032	Rice University	\$ 1,190,719.66	\$ 1,175,947.95	\$ 14,771.71
PP130032	UT M.D. Anderson Cancer Center	\$ 308,561.34	\$ 308,561.34	\$ -
PP130068	Texas Tech University HSC El Paso	\$ 1,098,920.00	\$ 1,055,233.87	\$ 43,686.13
PP130070	Baylor College of Medicine	\$ 1,499,929.00	\$ 1,499,278.51	\$ 650.49
PP130071	Texas Tech University HSC	\$ 300,000.00	\$ 295,231.58	\$ 4,768.42
PP130074	University of North Texas HSC Ft Worth	\$ 1,387,544.00	\$ 1,305,236.41	\$ 82,307.59
PP130075	UT Health Science Center Houston	\$ 299,898.00	\$ 299,155.46	\$ 742.54
PP130079	UT M.D. Anderson Cancer Center	\$ 628,680.00	\$ 628,680.00	\$ -
PP130083	Texas Tech University HSC El Paso	\$ 1,096,011.00	\$ 1,093,467.12	\$ 2,543.88
PP130084	Baylor College of Medicine	\$ 1,467,966.00	\$ 1,451,780.66	\$ 16,185.34
PP130090	Texas A&M University HSC	\$ 1,499,993.00	\$ 1,499,935.73	\$ 57.27
PP140018	University of Texas HSC Tyler	\$ 1,269,216.00	\$ 502,179.90	\$ 767,036.10
PP140026	The Bridge Breast Network	\$ 1,497,357.00	\$ 1,497,275.36	\$ 81.64
PP140028	Baylor College of Medicine	\$ 1,499,234.00	\$ 1,476,138.78	\$ 23,095.22
PP140033	Texas Tech University HSC	\$ 1,499,670.00	\$ 1,397,591.62	\$ 102,078.38
PP140049	UT Health Science Center San Antonio	\$ 149,985.00	\$ 140,724.49	\$ 9,260.51
PP140164	Texas Tech University HSC El Paso	\$ 1,499,438.00	\$ 1,467,882.94	\$ 31,555.06
PP140171	The Rose	\$ 539,144.00	\$ 490,970.15	\$ 48,173.85
PP140176	UT Health Science Center San Antonio	\$ 1,400,045.00	\$ 1,393,123.00	\$ 6,922.00
PP140182	UT Southwestern Medical Center	\$ 1,499,872.00	\$ 1,490,542.63	\$ 9,329.37
PP140183	UT Health Science Center Houston	\$ 1,495,388.00	\$ 1,285,496.47	\$ 209,891.53
PP140205	Asian American Health, dba Hope Clinic	\$ 1,496,840.00	\$ 1,492,840.79	\$ 3,999.21
PP140208	Legacy Community Health Services	\$ 1,500,000.00	\$ 1,500,000.00	\$ -
PP140209	University of Texas at San Antonio	\$ 573,095.00	\$ 563,168.69	\$ 9,926.31
PP140210	Texas A&M University	\$ 149,991.00	\$ 149,990.97	\$ 0.03
PP140211	Texas Tech University HSC El Paso	\$ 1,499,195.00	\$ 1,347,755.05	\$ 151,439.95
CP130013	DNatrix Inc	\$ 10,813,623.00	\$ 10,813,623.00	\$ -
CP130020	ESSA Pharma Inc	\$ 12,000,000.00	\$ 12,000,000.00	\$ -
CP130023	CerRx Inc	\$ 6,000,000.00	\$ 6,000,000.00	\$ -
DP140031	AERase Inc	\$ 19,806,145.00	\$ 19,806,145.00	\$ -
DP140067	Mirna Therapeutics Inc	\$ 16,765,075.00	\$ 379,245.76	\$ 16,385,829.24
DP140072	OncoNano Medicine	\$ 6,000,000.00	\$ 6,000,000.00	\$ -
R1312	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 1,999,997.36	\$ 2.64
R1313	Baylor College of Medicine	\$ 2,000,000.00	\$ 1,997,430.01	\$ 2,569.99
R1314	Baylor College of Medicine	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
RP140001	Baylor College of Medicine	\$ 900,000.00	\$ 897,964.14	\$ 2,035.86
RP140020-AC	UT Medical Branch at Galveston	\$ 203,428.00	\$ 202,810.48	\$ 617.52
RP140020-C1	UT Medical Branch at Galveston	\$ 551,286.00	\$ 551,271.25	\$ 14.75
RP140020-C2	UT Medical Branch at Galveston	\$ 493,130.00	\$ 390,628.16	\$ 102,501.84
RP140020-C3	UT Medical Branch at Galveston	\$ 179,302.00	\$ 132,846.07	\$ 46,455.93
RP140020-P1	UT Medical Branch at Galveston	\$ 337,836.00	\$ 322,343.50	\$ 15,492.50
RP140020-P2	UT M.D. Anderson Cancer Center	\$ 581,550.00	\$ 579,418.10	\$ 2,131.90
RP140020-P3	UT Medical Branch at Galveston	\$ 369,658.00	\$ 369,591.45	\$ 66.55

AY 14 Grant Activity

Grant Number	Entity	Grant Award	Grant Expenses	Grant Remaining Balance
RP140020-P4	UT M.D. Anderson Cancer Center	\$ 514,858.00	\$ 498,533.34	\$ 16,324.66
RP140021-AC	UT Southwestern Medical Center	\$ 61,775.00	\$ 59,553.09	\$ 2,221.91
RP140021-P2	UT Southwestern Medical Center	\$ 427,069.00	\$ 397,580.38	\$ 29,488.62
RP140021-P3	UT Southwestern Medical Center	\$ 425,338.00	\$ 425,338.00	\$ -
RP140021-P4	UT Southwestern Medical Center	\$ 528,558.00	\$ 528,473.13	\$ 84.87
RP140021-P5	UT M.D. Anderson Cancer Center	\$ 316,148.00	\$ 269,926.41	\$ 46,221.59
RP140022-AC	Baylor College of Medicine	\$ 173,764.00	\$ 173,760.05	\$ 3.95
RP140022-C2	Baylor College of Medicine	\$ 233,510.00	\$ 233,169.18	\$ 340.82
RP140022-C3	Baylor College of Medicine	\$ 211,697.00	\$ 211,691.55	\$ 5.45
RP140022-C4	Baylor College of Medicine	\$ 185,308.00	\$ 53,851.49	\$ 131,456.51
RP140022-P1	Baylor College of Medicine	\$ 413,445.00	\$ 410,897.17	\$ 2,547.83
RP140022-P2	Baylor College of Medicine	\$ 621,372.00	\$ 616,981.02	\$ 4,390.98
RP140022-P3	Baylor College of Medicine	\$ 381,376.00	\$ 372,201.98	\$ 9,174.02
RP140024-AC	Rice University	\$ 247,736.00	\$ 247,735.27	\$ 0.73
RP140024-C1	UT Health Science Center Houston	\$ 368,368.00	\$ 342,994.10	\$ 25,373.90
RP140024-C2	UT M.D. Anderson Cancer Center	\$ 484,611.00	\$ 484,610.86	\$ 0.14
RP140024-C3	UT Health Science Center San Antonio	\$ 411,928.00	\$ 391,321.65	\$ 20,606.35
RP140024-P1	Rice University	\$ 1,823,582.00	\$ 1,818,776.64	\$ 4,805.36
RP140024-P2	UT Health Science Center San Antonio	\$ 576,000.00	\$ 560,568.48	\$ 15,431.52
RP140102	Baylor College of Medicine	\$ 1,574,628.00	\$ 1,423,433.31	\$ 151,194.69
RP140103	UT Health Science Center Houston	\$ 1,745,076.00	\$ 1,711,141.03	\$ 33,934.97
RP140105	UT Health Science Center San Antonio	\$ 1,588,673.00	\$ 1,587,148.86	\$ 1,524.14
RP140106	UT M.D. Anderson Cancer Center	\$ 1,710,524.00	\$ 1,705,944.92	\$ 4,579.08
RP140108	University of Texas at Austin	\$ 1,648,814.00	\$ 1,648,813.55	\$ 0.45
RP140110	UT Southwestern Medical Center	\$ 1,916,038.00	\$ 1,867,636.07	\$ 48,401.93
RP140113	University of Houston	\$ 1,591,594.00	\$ 1,543,017.54	\$ 48,576.46
RP140132	Rice University	\$ 900,000.00	\$ 899,999.50	\$ 0.50
RP140140	UT Southwestern Medical Center	\$ 900,000.00	\$ 899,979.84	\$ 20.16
RP140141	Texas A&M University HSC	\$ 892,989.00	\$ 882,890.50	\$ 10,098.50
RP140143	UT Southwestern Medical Center	\$ 900,000.00	\$ 866,680.53	\$ 33,319.47
RP140152	UT Southwestern Medical Center	\$ 772,368.00	\$ 767,591.57	\$ 4,776.43
RP140179	Baylor College of Medicine	\$ 813,789.00	\$ 812,721.86	\$ 1,067.14
RP140181	Baylor College of Medicine	\$ 278,615.27	\$ 278,615.27	\$ -
RP140181	Methodist Hospital Research Institute	\$ 621,329.51	\$ (0.00)	\$ 621,329.51
RP140216	Baylor College of Medicine	\$ 199,715.00	\$ 199,709.68	\$ 5.32
RP140218	UT M.D. Anderson Cancer Center	\$ 826,744.00	\$ 818,492.86	\$ 8,251.14
RP140222	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 899,310.35	\$ 689.65
RP140223	Baylor College of Medicine	\$ 199,995.00	\$ 194,430.58	\$ 5,564.42
RP140224	UT M.D. Anderson Cancer Center	\$ 890,003.00	\$ 889,996.55	\$ 6.45
RP140233	UT Southwestern Medical Center	\$ 900,000.00	\$ 899,865.70	\$ 134.30
RP140244	UT M.D. Anderson Cancer Center	\$ 870,156.00	\$ 870,155.15	\$ 0.85
RP140252	Baylor College of Medicine	\$ 827,451.00	\$ 826,786.62	\$ 664.38
RP140258	Baylor College of Medicine	\$ 874,964.00	\$ 842,478.48	\$ 32,485.52

AY 14 Grant Activity

Grant Number	Entity	Grant Award	Grant Expenses	Grant Remaining Balance
RP140262	UT M.D. Anderson Cancer Center	\$ 899,505.00	\$ 846,678.21	\$ 52,826.79
RP140271	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 899,823.17	\$ 176.83
RP140285	UT Southwestern Medical Center	\$ 895,820.00	\$ 889,094.50	\$ 6,725.50
RP140298	Texas Tech University	\$ 674,465.00	\$ 674,230.10	\$ 234.90
RP140315	Methodist Hospital Research Institute	\$ 900,000.00	\$ 899,914.28	\$ 85.72
RP140320	UT Southwestern Medical Center	\$ 200,000.00	\$ 199,755.00	\$ 245.00
RP140323	UT M.D. Anderson Cancer Center	\$ 899,534.00	\$ 899,521.43	\$ 12.57
RP140328	University of Texas at Austin	\$ 199,852.00	\$ 194,881.35	\$ 4,970.65
RP140329	UT M.D. Anderson Cancer Center	\$ 198,957.00	\$ 198,956.99	\$ 0.01
RP140350	Baylor College of Medicine	\$ 199,298.00	\$ 196,468.92	\$ 2,829.08
RP140367	UT Southwestern Medical Center	\$ 900,000.00	\$ 899,984.41	\$ 15.59
RP140399	Baylor University	\$ 900,000.00	\$ 896,224.32	\$ 3,775.68
RP140402	UT Southwestern Medical Center	\$ 900,000.00	\$ 864,016.03	\$ 35,983.97
RP140408	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 899,998.65	\$ 1.35
RP140411	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 896,534.13	\$ 3,465.87
RP140412	UT Southwestern Medical Center	\$ 899,997.00	\$ 899,431.64	\$ 565.36
RP140429	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 893,390.54	\$ 6,609.46
RP140430	UT M.D. Anderson Cancer Center	\$ 836,557.00	\$ 836,557.00	\$ -
RP140435	UT Health Science Center San Antonio	\$ 200,000.00	\$ 194,660.13	\$ 5,339.87
RP140449	UT Southwestern Medical Center	\$ 200,000.00	\$ 198,763.04	\$ 1,236.96
RP140452	UT Health Science Center San Antonio	\$ 854,740.00	\$ 852,096.34	\$ 2,643.66
RP140456	Baylor College of Medicine	\$ 746,531.00	\$ 742,920.63	\$ 3,610.37
RP140462	UT M.D. Anderson Cancer Center	\$ 870,539.00	\$ 870,538.70	\$ 0.30
RP140464	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 900,000.00	\$ -
RP140468	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 115,709.26	\$ 784,290.74
RP140469	Baylor College of Medicine	\$ 695,527.00	\$ 693,503.57	\$ 2,023.43
RP140473	UT Health Science Center San Antonio	\$ 881,146.00	\$ 881,146.00	\$ -
RP140478	Texas Tech University	\$ 200,000.00	\$ 199,997.15	\$ 2.85
RP140479	Texas A&M University	\$ 199,993.00	\$ 199,959.34	\$ 33.66
RP140482	UT M.D. Anderson Cancer Center	\$ 256,061.00	\$ 255,738.01	\$ 322.99
RP140500	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 899,999.55	\$ 0.45
RP140515	UT M.D. Anderson Cancer Center	\$ 882,133.00	\$ 882,133.00	\$ -
RP140517	University of Texas at Dallas	\$ 490,689.00	\$ 441,639.04	\$ 49,049.96
RP140522	UT M.D. Anderson Cancer Center	\$ 899,991.00	\$ 899,888.84	\$ 102.16
RP140542	UT M.D. Anderson Cancer Center	\$ 865,587.00	\$ 821,084.37	\$ 44,502.63
RP140544	University of Texas at Dallas	\$ 900,000.00	\$ 897,943.22	\$ 2,056.78
RP140553	Baylor College of Medicine	\$ 900,000.00	\$ 891,525.51	\$ 8,474.49
RP140556	UT M.D. Anderson Cancer Center	\$ 898,721.00	\$ 898,721.00	\$ -
RP140563	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 899,998.62	\$ 1.38
RP140594	UT Health Science Center San Antonio	\$ 900,000.00	\$ 300,000.00	\$ 600,000.00
RP140606	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 894,012.20	\$ 5,987.80
RP140609	UT M.D. Anderson Cancer Center	\$ 610,704.00	\$ 610,324.80	\$ 379.20
RP140612	UT M.D. Anderson Cancer Center	\$ 900,000.00	\$ 899,902.65	\$ 97.35

AY 14 Grant Activity

Grant Number	Entity	Grant Award	Grant Expenses	Grant Remaining Balance
RP140616	Baylor College of Medicine	\$ 827,806.00	\$ 632,301.83	\$ 195,504.17
RP140648	University of Texas at Austin	\$ 900,000.00	\$ 883,030.78	\$ 16,969.22
RP140649	University of Texas at Austin	\$ 200,000.00	\$ 178,142.01	\$ 21,857.99
RP140655	UT Southwestern Medical Center	\$ 596,265.00	\$ 596,152.17	\$ 112.83
RP140661	UT Southwestern Medical Center	\$ 876,751.00	\$ 876,470.68	\$ 280.32
RP140664	University of Texas at Austin	\$ 200,000.00	\$ 199,531.26	\$ 468.74
RP140672	UT Southwestern Medical Center	\$ 687,759.00	\$ 687,507.47	\$ 251.53
RP140678	Scott & White Healthcare	\$ 199,959.00	\$ 199,959.00	\$ -
RP140685	UT Health Science Center San Antonio	\$ 825,285.00	\$ 505,143.05	\$ 320,141.95
RP140767	Baylor College of Medicine	\$ 899,131.00	\$ 877,049.81	\$ 22,081.19
RP140781	Texas Engineering Experiment Station (TEES)	\$ 200,000.00	\$ 199,996.41	\$ 3.59
RP140784	Baylor Research Institute	\$ 886,982.00	\$ 886,982.00	\$ -
RP140800	UT Health Science Center Houston	\$ 123,718.72	\$ 123,718.72	\$ -
RP140800	UT Medical Branch at Galveston	\$ 724,772.28	\$ 723,074.15	\$ 1,698.13
RP140840	Texas Tech University	\$ 199,993.00	\$ 184,564.29	\$ 15,428.71
RP140842	University of Texas at Austin	\$ 604,624.00	\$ 596,017.14	\$ 8,606.86
RR140008	Texas Tech University HSC	\$ 2,539,259.00	\$ 2,538,720.19	\$ 538.81
RR140012	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
RR140013	University of Houston	\$ 2,000,000.00	\$ 1,990,980.70	\$ 9,019.30
RR140023	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 687,507.47	\$ 1,312,492.53
RR140025	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,829,951.96	\$ 170,048.04
RR140033	Baylor College of Medicine	\$ 6,000,000.00	\$ 5,998,150.25	\$ 1,849.75
RR140036	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,996,878.64	\$ 3,121.36
RR140038	Baylor College of Medicine	\$ 2,000,000.00	\$ 1,999,943.14	\$ 56.86
RR140042	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,977,065.65	\$ 22,934.35
RR140053	Texas A&M University HSC	\$ 1,800,000.00	\$ 1,799,924.56	\$ 75.44
RR140071	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 1,999,999.88	\$ 0.12
RR140072	UT Health Science Center San Antonio	\$ 2,000,000.00	\$ 1,999,865.92	\$ 134.08
RR140073	Rice University	\$ 2,000,000.00	\$ 2,000,000.00	\$ -
RR140077	UT M.D. Anderson Cancer Center	\$ 2,000,000.00	\$ 1,997,565.56	\$ 2,434.44
RR140084	UT Southwestern Medical Center	\$ 2,000,000.00	\$ 1,999,123.52	\$ 876.48
	Grand Total	\$ 255,834,555.78	\$ 229,711,010.73	\$ 23,166,994.07



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

To: OVERSIGHT COMMITTEE MEMBERS
From: HEIDI MCCONNELL, CHIEF OPERATING OFFICER
Subject: FY 2022 SERVICE CONTRACT APPROVALS
Date: AUGUST 9, 2021

Recommendation

CPRIT staff recommends the Oversight Committee approve the following contracts for FY 2022:

- Contract renewal with ICON Clinical Research Limited for \$465,358 to perform diligence reviews of product development research grant applications,
- Contract renewal with Hahn Public Communications for \$149,975 to provide strategic communications services,
- Contract renewal with The Perryman Group for \$185,000 to perform an economic assessment of the cost of cancer in Texas, and
- Contract renewal with Weaver and Tidwell for \$186,000 to provide internal audit services.

In addition, staff is in the process of procuring outside counsel services to provide legal advice and evaluation services regarding the intellectual property and revenue sharing agreements associated with CPRIT grants for FY 2022. CPRIT expects total outside counsel expenditures for FY 2022 not to exceed \$125,000. CPRIT may contract with more than one law firm for outside counsel services; however, in the event that CPRIT needs to execute a contract with single firm for FY 2022, staff requests authorization for the agency to award one contract up to \$125,000. The Office of the Attorney General must approve the award of any outside legal services contract prior to contract execution.

The contract costs for consideration are not-to-exceed amounts, and payment is based on the delivery of actual services through time and materials expended by the vendor or as a fee for service based on the delivery of a report.

Background

Due Diligence Review Services Contract Renewal

ICON Clinical Research provides due diligence review reports which are an evaluation of a product development research grant applicant's business operations and management that covers discovery science capability, preclinical and clinical research capabilities, manufacturing facilities, regulatory approval pathway, management capability, financial viability, and commercial viability. ICON performs the diligence evaluation on a select subset of product development grant applications

following the completion of peer review evaluation of the Texas Company, Company Relocation and SEED grant applications submitted during any given product development program grant award cycle.

The pricing is based on ICON performing an estimated 15 company and two (2) SEED project diligence reviews in FY 2022. However, CPRIT can adjust the types of reviews if actual application results warrant within the total contract amount. CPRIT would be exercising the third and final renewal option.

Strategic Communications Services Contract Renewal

Hahn Public Communications provides strategic communication program services including communications strategy, media relations support, digital media relations advisory services, and communication program evaluation and assessment. CPRIT would be exercising the third and final renewal option under the current contract.

Economic Assessment of the Cost of Cancer in Texas Contract Renewal

The report produced by The Perryman Group provides CPRIT with the:

- statutorily required cost of cancer in Texas measurement; and
- measurement of key economic performance indicators based on CPRIT funding and program impact.

CPRIT would be exercising the second renewal option on the contract.

Internal Audit Services Contract Renewal

In FY 2022, the proposed internal audit plan includes two audits. One will be over vendor contract compliance and the other over the alignment of the agency's IT environment with Texas Administrative Code, Chapter 202 and the state's strategic IT goals as implemented by the Texas Department of Information Resources. The plan also includes follow-up procedures on the information general computer controls and records management related to the grantee compliance records platform.

CPRIT would be exercising the second of three contract renewals.

Outside Legal Counsel Service Contract

In FY 2021, CPRIT exercised the final renewals on the agency's two existing outside counsel contracts with Baker Botts, LLP and Yudell Isidore, PLLC. These firms served as CPRIT's intellectual property (IP) counsel and performed IP diligence review on product development grant applications. CPRIT's Product Development Review Council uses information gained through the IP due diligence process to complete their grant award recommendations

After internal discussion this summer, CPRIT decided to create a new senior staff position, Chief Due Diligence and Patent Officer (CDDPO). Beginning in FY 2022, the CDDPO will conduct the IP due diligence reviews of product development grant applications that outside counsel has done previously. CPRIT completed the interview process for the CDDPO position in July. Our preferred candidate has accepted the job offer and plans to start working at CPRIT in September.

Although the new CDDPO will be responsible for CPRIT's IP due diligence work, it remains necessary for CPRIT to continue to contract with outside counsel. The primary reason outside counsel is needed is in the situation that the CDDPO has a conflict of interest with a company under review. The outside counsel will perform the IP due diligence review for that company. Outside counsel will also serve as a resource if CPRIT must perform a large number of IP reviews in a short period of time or if access to specialized databases or expertise are necessary. In addition, CPRIT's outside counsel will continue to provide the agency legal advice in contract negotiations regarding non-standard revenue sharing terms with CPRIT-funded companies.

CPRIT has a published Request for Offer for Outside Counsel Contracts that closes August 9, 2021, for CPRIT to be able to award at least one contract up to \$125,000 for FY 2022. If more than one firm meets CPRIT's requirements, then the \$125,000 will be divided among the multiple contracts. The Office of the Attorney General must approve any firm selected for an outside counsel contract by CPRIT.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: FY 2022 – 2023 PROPOSED SUBCOMMITTEE ASSIGNMENTS
DATE: AUGUST 11, 2021

The Oversight Committee votes to revise subcommittee assignments at its last meeting of the fiscal year in every odd-number year. CPRIT staff solicited members’ preference last month. The suggested assignments reflect those preferences; every member received their first choice for program and non-program subcommittees. The new assignments also balance the workload among members. Presiding Officer Dee Margo will present the proposed subcommittee assignments to the Nominations subcommittee for discussion at their meeting on August 13.

2022-2023 Assignments	Audit	Board Gov	Prevention	Academic Research	Product Dev	Contract	Special Issues
Cummings		X	X			X	X
Hernandez		X		X	X		
Margo	X		X				X
Montgomery				X	X	X	X
Patel			X	X			
Payne	X				X	X	
Rice	X	X		X			
Rosenfeld		X			X	X	X

X denotes proposed subcommittee chairs; the Contract and Special Issues subcommittees will meet as needed



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE
FROM: WAYNE R. ROBERTS, CHIEF EXECUTIVE OFFICER
SUBJECT: PROPOSED AMENDMENTS TO BOARD GOVERNANCE CHARTER
DATE: AUGUST 11, 2021

At the May 19, 2021, Oversight Committee meeting Presiding Officer Dee Margo notified members that the Board Governance Subcommittee will take on the responsibilities of the Nominations subcommittee beginning in FY 2022 and the Nominations subcommittee will no longer exist. CPRIT has amended the Board Governance subcommittee charter to reflect the subcommittee's new responsibilities (all changes denoted in red in the attached document.) I presented the proposed changes to the Board Governance subcommittee at their meeting on August 5; the subcommittee recommends that the Oversight Committee approve the changes to its charter.



CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS

CHARTER OF THE BOARD GOVERNANCE AND ETHICS SUBCOMMITTEE FOR THE CANCER PREVENTION AND RESEARCH INSTITUTE OF TEXAS

BACKGROUND

The Oversight Committee of the Cancer Prevention and Research Institute of Texas (“CPRIT” or “Institute”) established a Board Governance and Ethics Subcommittee (the “Subcommittee”) on September 5, 2012. This Charter, adopted by the Oversight Committee on November 22, 2013, supersedes any other documents relating to the Board Governance and Ethics Subcommittee.

PURPOSE

In addition to facilitating the Oversight Committee’s biannual officer election process; the primary purpose of the Subcommittee is to review and recommend proposed changes for approval to the Oversight Committee with respect to the following:

- Oversight Committee Bylaws and other organizational documents as may be necessary;
- Institute Policies;
- Administrative Rules;
- The delegation of authority to the Chief Executive Officer;
- The Institute’s Code of Conduct and Ethics, including the administration thereof; ~~and~~
- Composition and effectiveness of the Institute’s Advisory Committees, including finding and nominating qualified candidates for appointment to the advisory committees; and
- An annual review of the internal policies and processes of the Oversight Committee.

COMPOSITION

The Subcommittee shall be composed of at least three members of the Oversight Committee; such members to be appointed from time to time by a majority vote of the Oversight Committee at a meeting at which a quorum is present and approved by the Oversight Committee. The

Oversight Committee shall designate the Chairperson of the Subcommittee from among its members. A member of the Board Governance Subcommittee will serve until his or her successor is duly appointed and qualified unless the member resigns or is removed from the Board Governance Subcommittee. The Oversight Committee may replace any member of the Subcommittee by a majority vote of the Oversight Committee.

MEETINGS AND QUORUM

The Subcommittee shall meet as often as the Chairperson of the Subcommittee considers appropriate, but at least quarterly, to perform its duties and responsibilities under the Bylaws and as set forth in this Subcommittee charter. The Subcommittee shall keep regular minutes of its meetings and cause such minutes to be recorded in books kept for that purpose in the principal office of the Institute and report the same to the Oversight Committee at its next regular meeting.

If a member of the Subcommittee is absent from any meeting, or disqualified from voting at that meeting, then the remaining member or members present at the meeting and not disqualified from voting, whether such member or members form a quorum, may, by a unanimous vote, appoint another member of the Oversight Committee to act at the meeting in the place of any such absent or disqualified member. Unless the Oversight Committee provides otherwise, at all meetings of the Subcommittee, a majority of the then authorized members of the Subcommittee will constitute a quorum, and the vote of a majority of the members of the Subcommittee present at any meeting at which there is a quorum will be the act of the Subcommittee.

Unless the Oversight Committee provides otherwise, the Subcommittee may make, alter, and repeal rules and procedures for the conduct of its business. In the absence of such rules and procedures, the Subcommittee shall conduct its business in the same manner as the Oversight Committee conducts its business, except that meetings of the Subcommittee are not required to be conducted pursuant to the Open Meetings Act.

DUTIES AND RESPONSIBILITIES

The Subcommittee has the following duties and responsibilities:

- Review and recommend changes to the Oversight Committee Bylaws for approval by the Oversight Committee;
- Propose and provide guidance about any other organizational documents for approval by the Oversight Committee;
- Review and recommend changes to the Institute's administrative rules for approval by the Oversight Committee;

- Review, provide input and recommend approval, if necessary, changes to Institute policies;
- Propose and recommend for approval a policy regarding the delegation of authority to the Chief Executive Officer, including any recommended changes;
- Review and recommend changes to the Institute’s Code of Conduct and Ethics for approval by the Oversight Committee;
- Monitor compliance with the Code of Conduct and Ethics;
- Identify qualified individuals for appointment as members of the Institute’s advisory committees;
- Circulate to Oversight Committee members in advance of a public meeting written notification of the committee's intent to make advisory committee nominations, along with such information about the nominees as may be relevant;
- Facilitate the Oversight Committee’s officer election process by accepting nominations and recommending candidates for Oversight Committee consideration. The Subcommittee may work together with the outgoing Oversight Committee Chair to fulfill duties related to board elections;
- Annually review and report to the Oversight Committee about the composition and effectiveness of the Institute’s advisory committees; and
- Report to the Oversight Committee annually, or upon a more frequent schedule as established by the Oversight Committee Chair, regarding the Oversight Committee’s internal policies and processes, including any recommended changes.

OTHER DUTIES

The Subcommittee will submit this Charter to the Oversight Committee for its approval, evaluate the Subcommittee’s performance on a periodic basis, periodically review the adequacy of this Charter and perform any other activities consistent with this Charter, the Bylaws, and applicable laws as the Subcommittee or the Oversight Committee considers necessary or appropriate.

In addition to its duties and responsibilities, the Subcommittee shall perform such other special functions, duties or responsibilities related thereto as may from time to time be designated to it by the Oversight Committee Chair.



CANCER PREVENTION & RESEARCH
INSTITUTE OF TEXAS

MEMORANDUM

TO: OVERSIGHT COMMITTEE MEMBERS
FROM: DEE MARGO, PRESIDING OFFICER
SUBJECT: FY 2022 – 2023 CPRIT OVERSIGHT COMMITTEE OFFICERS
DATE: AUGUST 13, 2021

Oversight Committee bylaws require that the members elect a new presiding officer, vice presiding officer and secretary for two-year terms. The election takes place at the last Oversight Committee meeting of the fiscal year in every odd-numbered year. As the outgoing presiding officer, I work with the Nominations subcommittee to assemble and propose a slate of candidates for Oversight Committee consideration.

The Nominations subcommittee and I have reviewed the proposed the slate of officer candidates, listed below, to lead the Oversight Committee for fiscal years 2022 and 2023. The three potential officer candidates are interested and willing to serve. I recommend that the Oversight Committee vote to approve this highly qualified slate of officers.

Proposed Officers for FY 2022 – 2023

- Mahendra Patel, M.D., Presiding Officer
- David Cummings, M.D., Vice Presiding Officer
- Cindy Barberio Payne, Secretary



Oversight Committee Meetings and Standing Subcommittees Meetings FY 2022

November 2021

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
	1	2 PIC Meeting CPRIT Staff Only	3 Portal Opens	4 Board Governance	5	6
7	8 Audit	9 Prevention	10 Academic Research Product Development	11	12	13
14	15	16	17 Oversight Committee Meeting	18	19	20

February 2022

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
		1 PIC Meeting CPRIT Staff Only	2 Portal Opens	3 Board Governance	4	5
6	7 Audit	8 Prevention	9 Academic Research	10 Product Development	11	12
13	14	15	16 Oversight Committee Meeting	17	18	19

May 2022

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
1	2	3 PIC Meeting CPRIT Staff Only	4 Portal Opens	5 Board Governance	6	7
8	9 Audit	10 Prevention	11 Academic Research	12 Product Development	13	14
15	16	17	18 Oversight Committee Meeting	19	20	21

August 2022

Sun	Monday	Tuesday	Wednesday	Thursday	Friday	Sat
	1	2 PIC Meeting CPRIT Staff Only	3 Portal Opens	4 Board Governance	5	6
7	8 Audit	9 Prevention	10 Academic Research	11 Product Development	12	13
14	15	16	17 Oversight Committee Meeting	18	19	20

Note: Unless the subcommittee members agree to a different time, all subcommittee meetings will begin at 10:00 a.m. Members of the Audit and Program subcommittees should allocate 1.5 hours for a meeting. All others subcommittee meetings require one hour.

